CHANGING
THE GAME

How Video Games
Are Transforming
the Future of Business

> DAVID EDERY

> ETHAN MOLLICK

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PART I

INTRODUCTION

Many of our friends like to tease us about our work and research. "Getting paid to play games," they say with a laugh, and it's hard not to smile when they do. There's no question that we love our work, and we don't mind the jabs. But what our friends don't realize, and what we hope to demonstrate through this book, is that work and games are not actually an unusual or antagonistic combination. In fact, companies of all shapes and sizes have begun to use games to revolutionize the way they interact with customers and employees, becoming more competitive and more profitable as a result.

From our vantage points in academia and within the game industry, we have watched as games have become a powerful tool through which organizations teach, persuade, and motivate people. Microsoft, for example, has used games to painlessly and cost-effectively *quadruple* voluntary employee participation in important (but tedious) tasks, like testing Windows Vista for bugs. Medical schools have used game-like simulators to train surgeons, reducing their error rate in practice by a factor of six. A recruiting game developed by the U.S. Army, for just 0.25% of the Army's total advertising budget, has had more impact on new recruits than all other forms of Army advertising combined. And Google is using video games to turn its visitors into a giant, voluntary labor force—encouraging them to manually label the millions of images found on the Web that Google's computers cannot identify on their own.

These are just a few of the examples that we introduce in *Changing the Game*, which begins with a discussion of how games and marketing have become a powerful combination, continues with an exploration of how games are being used to train and recruit employees, and ends with a look at the ways that games can be used to fundamentally change the way that companies do their day-to-day business. And although we've tried very hard to give specific, actionable advice that businesspeople can use to harness the power of games, we've also attempted to paint a broader picture of the dramatic impact that games are having on the world in general.

Games can make it fun for employees to learn how to manage a supply chain. Games can encourage customers to voluntarily spend hours learning about the features of a product. Games can encompass massive economies of virtual goods and services that are worth billions of real-world dollars. All of this—and much more—is happening right now at the intersection of business and games, and the forward-thinking companies at that junction have already begun to reap the great rewards of their effort. Games are transforming the nature of work and play in so many ways that, whether you work in a business, governmental organization, or non-profit, you can almost certainly find a way to take advantage of games to better accomplish your goals.

So, are you ready to play?

CHAPTER 1

AN INTRODUCTION TO GAMES, AND WHY THEY MATTER

These are good times for the video game industry. While growth in the movie industry has been slow and while the music business has contracted, games have grown at double-digit rates. Games are now on the verge of eclipsing the music industry[1] and have already surpassed Hollywood box office revenues.[2] Microsoft's *Halo 3,* one of the most anticipated video games ever launched, earned $170 million in the United States alone within 24 hours—more than the theatrical release of the movie *Spider-Man 3* or the novel *Harry Potter and the Deathly Hallows.*[3] And if you're not impressed by those numbers, consider this: A survey taken in 2007 found that more people in Calgary, Toronto, and Halifax could identify a photo of Nintendo's famous video game character, Mario, than could identify a photo of Canada's Prime Minister, Stephen Harper.[4] Not half bad for a fictional Italian plumber.

So, we'll take it for granted that you're probably somewhat familiar with video games. Nevertheless, even game industry analysts occasionally struggle to keep abreast of major happenings in the game space, which has evolved as rapidly as it has grown. In fact, we're willing to bet that the vast majority of people have no idea just how varied and far-reaching games have become. This chapter provides an overview of the current state of video games, and introduces a few concepts that will help you understand why games matter to the business world.

Why Games Matter

To some of us, everything in life looks like a game—especially business. There are the rules of the game (legal restrictions, generally accepted accounting principles). There are referees (trade bodies, courts). There are high scores (market capitalization) and there are levels of progression (director becomes VP becomes SVP, just as a level 20 wizard becomes a level 30 archmage, or a tennis player becomes a "pro"). There is cheating (fraud, corporate espionage) and there is teamwork (from internal cooperation to corporate alliances). The games we play when we are children, be they Little League baseball or cops and robbers, prepare us for the more serious games we play as adults.

Yet despite the preponderance of evidence that gameplay is a crucial communications medium and training ground for children, despite the prevalence of games in our society, and despite the meteoric rise of video games as a profoundly influential and profitable medium, the word "game" continues to have a negative connotation in the workplace. It is our contention that games, and most especially video games, not only belong in the workplace, but can make all the difference between success and failure. The key is to harness the properties of games that make them so uniquely compelling. Which invites the question "What are those properties, and why are games compelling?"

This is not a simple question to answer. One could argue that games are compelling because they entertain hundreds of millions of people all over the world, and there is certainly truth to that. But entertainment is just a symptom of gameplay, not the explanation of why it captures our attention and imagination. The answer to our question is ultimately much deeper and more interesting than that.

Games are compelling because, at their best, they represent the very essence of what drives people to think, to cooperate, and to create. Learning is not "work" in the context of a game—it is

puzzle-solving, exploration, and experimentation. Cooperation is not a "necessary evil" in the context of a game—it is the best part of the experience. While many communities struggle to foster the most basic level of civic engagement, game-playing communities are remarkably active, engaged, and generous with their time and effort. How many companies can claim that a significant percentage of their customers voluntarily create and disseminate assets that dramatically increase the value of their products? As we will discuss in greater detail later in the book, a large number of video game companies can.

This book's purpose is to help you think about how video games are leading to the transformation of the wider business world, if not the world in general. Many of these changes, like using games for advertising and marketing purposes, have been under way for many years. Yet more transformative changes, like the use of games to spur innovation or harness collective intelligence, are still primarily being incubated in research labs and at universities. In this book's three major sections, "Games and Customers," "Games and Employees," and "Games and the Future of Business," we discuss how companies are using games to change how they interact with customers and potential customers, how they interact with employees and potential employees, and, finally, how companies are using games to change the way they inherently function, in general. Throughout the book, we try to keep the focus on what makes games special—interactivity, immersion, and fun—and what that means for businesses.

Before we dive deeper, we would like to stress one very important thing: Games must be played to be truly understood, or, at the very least, they must be carefully observed. A quick description of any game will be, at best, boring *("The goal of Tetris is to make little blocks fall into holes between other little blocks")* and, at worst, incomprehensible *("Dwarf Fortress can be won by digging lava traps while avoiding elephants and preventing your carpenters from becoming*

possessed"—that latter one is a real game, by the way.) To make our descriptions more meaningful, we have put together a Web site, www.ChangingTheGameBook.com, which includes links to screenshots, videos, and playable versions of the games that we describe. Take a look and play a few of the games—it will make your reading experience much more meaningful. And, after all, it isn't often that you get to play games and call it work…though by the end of this book, we hope you'll agree that perhaps it *should* be!

Who Plays What on Which

For some people, their first experience with video games consisted of standing in front of an arcade machine, watching lines of incoming *Space Invaders* descend inexorably closer to the gun turret at the bottom of the screen. Or maybe it was sitting on a couch in front of the original Nintendo Entertainment System, challenging a friend to a relatively primitive game of electronic football. Others might claim that they have never played a video game of any kind, but the odds are that they have, at very least, played *Solitaire* or *Minesweeper* on a Windows computer—perhaps to pass the time during a boring conference call.

Despite being a relatively young industry, video games have a rich heritage. They were being built on the sly by bored mainframe computer programmers back in the 1950s, so that by the 1980s the basic elements of today's industry were already in place. Video games first became popular via arcade machines, represented by the iconic *Pac-Man* game sitting alongside pinball machines in a local pizza parlor or bar. But soon after arcade machines became an international phenomenon, two ways of playing games at home appeared: the dedicated console, such as the classic Atari 2600, and the personal computer. Through booms and busts, all three methods of playing games are still with us, though the arcade is a mere shadow of its former self.

The big winner over the past decade has been the dedicated gaming console, the latest incarnations of which are Microsoft's Xbox 360, Nintendo's Wii, and Sony's PlayStation 3, as well as their portable companions, the Nintendo DS and the Sony PSP. These specialized consoles have come to dominate the attention of the game industry, though PC games remain highly competitive, especially in certain genres. In addition, the cellular phone has recently become a widely prevalent and lucrative gaming platform, especially in regions of the world such as India, where phone ownership greatly exceeds computer and console ownership. And, of course, new gaming platforms seem to evolve almost daily—the personal video units on airplanes, the latest set-top boxes from cable companies, Apple's ubiquitous iPod…the list never stops growing.

Ultimately, these machines all serve as vehicles for delivering video game content itself. According to the MobyGames database (an online encyclopedia), there are at least 21,000 different games that have been commercially released in one form or another in the past 30 years, and that's just scratching the surface. Tens of thousands of additional games—many of them free to play—have been released online by various organizations and talented individuals. Most games, commercial or otherwise, fall into relatively well-established genres such as puzzle games, racing games, and strategy games. It would require an entire book just to describe these genres in significant detail, so, for the purpose of discussing games more generally, we would like to introduce two different dimensions along which most games can be categorized.

Casual and enthusiast games: Games that most people would consider "pick up and play," that do not demand great dexterity, and that can be played for short periods (but often are played for hours!) are called *casual* games. Many arcade games and most puzzle games, like *Pac-Man* and *Tetris*, respectively, fit into this category. Anyone can play a casual game for a few minutes and immediately understand the basic mechanics that make it fun. Casual games

thrive on the Web and are common on portable devices like mobile phones. They are played by a remarkably large and broad audience: 52% are female,[5] and a substantial percentage of the total player population is over the age of 35. More than 150 million people world-wide play free casual games,[6] usually on their PCs or phones.

The opposite end of the spectrum are those games for the *enthusiast*, which tend to involve more intricate plotlines and com-plex gameplay, and may require tens of hours of playtime to com-plete. Enthusiast games are what many people think of when they imagine the stereotypical video game—the fast-paced shooting game played by a group of teenage boys; the complicated simulation replicating the Battle of Gettysburg; the incredibly realistic-looking virtual basketball game; and the latest *Pokémon* monster-training game being played by a group of children. Enthusiast games like these make up the majority of video games that are sold for home consoles like the Xbox 360 and PlayStation 3. They often have extremely large development budgets, ranging from $5 to $30 mil-lion, and the most high-profile of these games are launched with the same marketing theatrics as a Hollywood blockbuster.

Single-player and multiplayer games: To really understand the world of video games, however, we need to consider a second dimension of gameplay: sociability. Video games have progressed far beyond the stereotypical awkward, antisocial player sitting alone on a couch and have embraced the importance of companionship and community. Many of the most popular video games, both enthusi-ast and casual, feature compelling modes in which friends and/or strangers can play together.

This represents the second dimension in our diagram, which stretches from *single-player* to *multiplayer*. We start with games that are dedicated to solo play, progressing to those that support a cou-ple of people playing together, to those that support teams of dozens of players in contest with one another, and, finally, to so-called massively multiplayer online games (MMOGs), in which hundreds

or thousands of players participate in the same game world at the same time.

To demonstrate how games fit on our diagram, we have selected five relatively famous and interesting games that nicely illustrate the fundamental attributes of their genre, as shown in Figure 1.1.
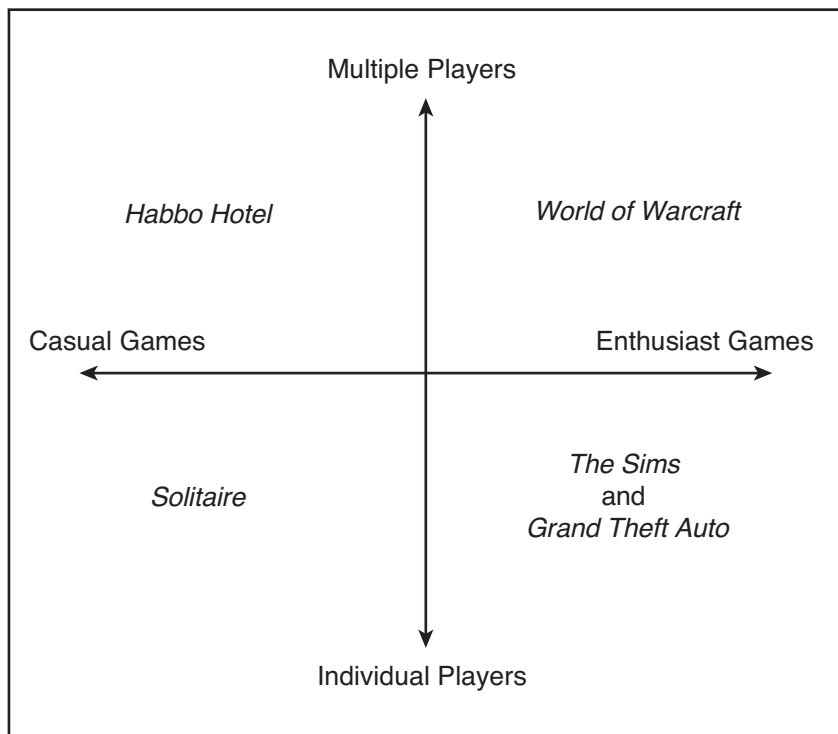
Multiple Players

Habbo Hotel   World of Warcraft

Casual Games   Enthusiast Games

Solitaire   The Sims
                                      and
                                Grand Theft Auto

Individual Players

Figure 1.1   Placing five popular games according to which dimensions they fall in.

Single-Player, Enthusiast: *Grand Theft Auto 3*

Because the single-player enthusiast category of games is incredibly diverse, it's worth illustrating it with two very different examples of best-selling games. The first is *Grand Theft Auto 3,* also known as

GTA3. It was released in 2001 and remains one of the best-selling, highest-rated, and most controversial video games of all time. *GTA3* helped define an entirely new genre now known as the "sandbox game."

These games, like a sandbox full of toys, encourage players to experiment with their environment, without being constrained to a specific plotline or course of action. In the case of *GTA3* and its sequels, the "sandbox" is an entire virtual city full of realistic-looking buildings, vehicles, and people. You can drive from industrial zones, to commercial districts, to suburban neighborhoods. When you walk past a hospital, you actually overhear its residents discussing medical issues. Businessmen will pass you on the sidewalk, bitterly complaining about how hard they work. *GTA3* is alive with virtual residents of all types and ages, all of whom are just going along with their daily business…until you fire a gun into the air, that is. Then everyone nearby runs for cover.[7]

GTA3 enables its players to indulge in criminal acts, such as stealing cars, killing people, and consorting with prostitutes. These activities are packaged into a complex story of betrayal and revenge, which is slowly revealed to players as they complete missions throughout the city. But ultimately, a player can just as easily choose to ignore the plot and the missions and have fun however they see fit.

The impressive level of detail in *GTA3* and its sequels does not end with realistic-looking buildings or animated pedestrians. Players can dress their character in new clothes, feed them at fast-food restaurants such as "Cluckin' Bells" (which, when done excessively, will make the character fat and slow), and even earn money for their character by delivering pizzas or driving a cab. There are approximately 50 different vehicles in the game, all of which can be hijacked and driven around the city. The vehicles themselves are highly distinctive—from ponderous flatbed trucks to speedy sports cars to ambulances (which, ironically, can be used to help injured

people after you've hijacked them!). And if you get into an accident, parts of your car will actually fly off, making your once-attractive ride look more like a salvage operation.

Even details like the presence of in-car radios were not neglected by the developers of *GTA3*. As you drive around the city, you can tune in to no fewer than nine radio stations, each of which plays a different style of music, from classical music to hip-hop to reggae. Interestingly, despite all the effort put into *GTA3*'s driving experience, the game rewards players who *don't* choose to drive everywhere, by making their character more fit and more capable of running long distances. Subtle (and surprisingly thoughtful) touches like this are precisely the sort of thing that turned *GTA3* into a massive commercial success. Of course, *GTA3* receives more attention for its darker features—for example, the ability to run over pedestrians in a speeding car, perhaps after shooting them first. These aspects of *GTA3* have led at least one critic to brand it a "murder simulator," and, although that is an extremely overdramatic description at best, there is no doubt that *GTA3* is a very violent game.

When it was first released, *GTA3* stood out in part because it was so unique, in part because its vast virtual environments were so realistic, and in part because *GTA3* recognized that game players often *like* to test the limits of the games they play. A rich, well-designed game that clearly encourages exploration and experimentation was bound to be a smash hit. Today, there are many other games that have adopted *GTA*'s "sandbox" style of play, and many of those feature remarkably large, complex, and realistic environments. These virtual environments are, in many cases, ideal settings for in-game advertising and training simulations; the potential for both is discussed later in this book.

Single-Player, Enthusiast: *The Sims*
The Sims and its sequel, the not-so-originally-named *The Sims 2,* are the best-selling PC games of all time, and are in many ways the

polar opposites of *GTA3*. Whereas *GTA3* commonly serves as a sandbox for mayhem, *The Sims* is more like a virtual dollhouse or interactive soap opera. Players of *The Sims* control a household full of simulated people, or "Sims," with very human needs such as career growth, companionship, hunger, and sleep. These Sims eat pizza and watch TV, play with one another and with visiting Sims, and leave home to attend school or go to work. Your job, as a player, is to keep them happy.

In a normal game, the level of personality expressed by virtual characters would not be sufficient to exclusively maintain a player's focus for extended periods—but *The Sims* is not a "normal" game. Sims have horoscopes and personality traits such as neatness and playfulness. They express a wide range of emotions, they age, and they pass their "genes" on to their virtual children. They even have memories; for example, a Sim will mourn the loss of a loved one long after that person has died. That's right—Sims pass away, too.

Figure 1.2 Sims indulging their creative side (*SimCity, The Sims,* and *The Sims 2* ™ and © of Electronic Arts Inc. Used with permission.)

While playing the game, players earn money that can be spent on virtual items for their Sims, such as furniture or home electronics. But even a brand-new flatscreen TV won't keep Sims happy for too long; there are always relationships to maintain, careers to advance, and more home furnishings to purchase. In the words of one author, "*The Sims* doesn't really feel like a game. It seems more like gardening, or fixing up your house. One of the game's small triumphs is to make work seem like fun."[8]

The Sims offers predefined characters and scenarios to play with; players are also invited to develop their own story lines and create their own Sims, which a great many players have done. On the official *The Sims* Web site, fans have submitted more than 125,000 stories about their Sims, many illustrated with movies taken within the game. *The Sims* shows what video games, at their best, can offer—an outlet for creativity, a new way to engage the world, and many hours of entertainment—all in one package.

As a result of its compelling gameplay and subject matter, *The Sims* has become not only the most popular computer game of all time, but also one of the most demographically diverse "enthusiast" games. It is played by more women than men (60% versus 40%) and by many adults in general. *The Sims* has also proven to be a remarkably fertile ground for real-world brands, through both the conscious efforts of advertisers and the spontaneous efforts of players. For example, players have reproduced and shared more than 1,400 car makes and models in *The Sims,* not to mention a fair percentage of the IKEA furniture catalog.

Together, *The Sims* and *GTA* show the wide-ranging appeal of enthusiast games, from the stereotypical male gamer to the stay-at-home mother. But enthusiast games, despite their large share of press attention, are ultimately just one portion of the video game world—which brings us to the booming market for casual games.

Single-Player, Casual: *Solitaire*

There are so many popular casual games that it was hard to choose one to showcase. But at day's end, there is one single-player, casual game that has entertained more people, and gained greater recognition, than possibly any other video game in history. That game, of course, is *Solitaire*. Since Microsoft included *Solitaire* with the Windows operating system, it has been accused of everything from rotting our brains to uncountable losses in corporate productivity. New York City Mayor Michael Bloomberg famously fired a member of his staff for openly playing the game,[9] while a North Carolina state senator once attempted to ban *Solitaire* from government-owned PCs.[10] It has been described as "easy to learn, hard to master," fun for a few minutes or a few hours, and a great way to de-stress after (or during) work. It is played by all major demographics: old and young, male and female, black and white. Not coincidentally, these are the ideal characteristics of any good casual game, of which *Solitaire* is but one example.

What you may not be aware of is that hundreds of video game versions of *Solitaire* exist today. Some are incorporated into Web sites—like MSN Games—as an advertising vehicle and traffic attractor. Some are made available free or via a paid download to your local PC. Some are built into specialized "game portals" like Pogo.com, a Web site that offers both free casual games and "premium" games that can be played only if you pay a subscription fee. Some can be purchased for use on devices as diverse as a cellphone or the Xbox 360. *Solitaire* has literally found its way to every corner of the world, on almost every modern consumer entertainment device. Although the various versions of *Solitaire* differ widely in terms of their graphical polish, their rule set, and even the existence of a plotline, at the end of the day they all trace their roots back to the original, simple, classic *Solitaire* card game.

Many other casual games, like *Bejeweled* and *Tetris*, have taken the world by storm since the first days of *Solitaire*. But until recently, these games were considered neither a major potential source of revenue by most video game companies, nor a useful media form by businesses. All of that has changed, and it is our contention that casual games like *Solitaire* represent an excellent platform for advertisers, as well as a useful model for any business seeking to understand how to distill engagement into its purest form.

Multiplayer, Enthusiast: *World of Warcraft*

Few games have more successfully captured the attention of consumers, investors, and academics than *World of Warcraft*, far and away the most famous of the wordily named "massively multiplayer online role-playing games" (MMORPG). *World of Warcraft* is, in the truest sense of the words, a "virtual world"—one that can support thousands of players simultaneously. Devotees of *World of Warcraft* create a character ("avatar") when first joining the game, then spend days, months, and even years joining forces with other players to explore continents, slay monsters, find rare items hidden throughout the world, and much more. It is extremely difficult to understand the scope of *World of Warcraft* without seeing it for yourself—players can literally spend hours running or flying nonstop across dramatically varied and richly populated terrain. In fact, many players of *World of Warcraft* claim to enjoy the game in large part because they simply enjoy "seeing the sights." Those sights include underground cities, murky swamps, troll-infested jungles, scorpion-filled deserts, and beautiful beaches—all of which seem even more remarkable when viewed from the back of a soaring gryphon.

Figure 1.3　A player of *World of Warcraft* riding a gryphon (*World of Warcraft*® provided courtesy of Blizzard Entertainment, Inc.)

Players of *World of Warcraft* often band together in groups of 2 to 40 people in order to help one another travel through dangerous locations, kill enemies, and complete quests. But regardless of whether someone prefers to play *World of Warcraft* alone or in a group, they will experience the social aspects of the game. If they visit a city, they will walk past tens or hundreds of player avatars, all engaged in conversation with one another as well as other activities. If they purchase a virtual item from a store or from another player, their purchase affects the global economy and contributes to changes in price and supply. *World of Warcraft* is truly a massively multiplayer game—even for loners.

As of the time of this writing, *World of Warcraft* has more than 9 million subscribers. U.S. residents pay an impressive $15 per month for the privilege of playing the game, in addition to approximately $50 when first purchasing it. In 2007 alone, *World of Warcraft* generated $1.1 billion,[11] and there is currently no end in sight to its revenues. It has attracted players from all over the world,

and has even been called "the new golf" by Silicon Valley entrepreneurs looking for a hip new environment in which to do their professional networking.[12]

World of Warcraft is remarkable for many reasons, not the least of which are the various ways in which it deeply engages its players. For example, over the course of several months, a typical player might spend many hours simply customizing the appearance of her avatar, for both aesthetic and strategic purposes. She might work for days to acquire a particularly powerful and impressive-looking sword, and after she has acquired that sword, she might spend several more days earning enough gold to buy an enchantment that makes the sword glow with flames. Through mechanisms like this, the developers of *World of Warcraft* have proven adept at channeling the seemingly inexhaustible energy of their players, a major challenge for a game that bills monthly and is played by many customers for several hours a day.

To help put this in context, imagine if someone asked you to perform the same menial task 50 times in a row; odds are you probably wouldn't appreciate it. But *World of Warcraft* and similar games ask this of players all the time by presenting them with "quests" that involve significant repetition, generally by requiring rote travel across significant distances, or by requiring the player to slay a given type of monster over and over again. The reward for these activities is generally the advancement of your avatar's strengths and abilities, a useful or attractive virtual item, and the opportunity to progress further down the game's storyline. The phenomenon of performing the same task in a game repeatedly is called "grinding," and it adequately describes one of the less stimulating aspects of *World of Warcraft* in specific, and many MMORPGs in general. In more extreme but not unusual cases, players may spend upwards of 50 hours literally slaying and reslaying the same monster, which reappears under certain conditions, in hopes of attaining a very rare item that is awarded with low probability upon the death of that

monster. These players are effectively *paying for the privilege of grinding* because of the compelling incentives and activities woven around it. How many companies, even with the incentive of a paycheck, fail to encourage the reliable execution of rote tasks? But perhaps the more interesting question is this: Could games help businesses with this problem? We explore the answer to that question in Chapters 8 through 10.

Lastly, while we have mentioned the importance of virtual items and currency in this and other games, we have not yet touched on their "real-world value." As it turns out, many regular users of massively multiplayer games are willing to spend real money on virtual goods, even if such transactions are officially banned by the game's operator (as is the case with *World of Warcraft*). These transactions are common and lucrative enough that estimates of their total yearly value range from the hundreds of millions to the *billions* of dollars per year.

Games like *World of Warcraft* hint at potentially tremendous opportunities for businesses that are willing to explore exciting if unconventional strategies. We will explore these strategies, among others, in the "Games and the Future of Business" section at the end of this book.

Multiplayer, Casual: *Habbo Hotel*

Habbo Hotel is one of the most successful instances of a new breed of game that has taken the entertainment industry by storm. Although the ordinary person is much more likely to have heard of *World of Warcraft*, they are not more likely to have played it. *Habbo Hotel* has more than 97 million registered users, and attracts 9.5 million unique visitors a month,[13] only slightly less than *World of Warcraft*'s subscriber base and growing more quickly. It is targeted primarily at teens and has gained popularity all over the world, including the U.S. The user experience in *Habbo Hotel* is simple to enjoy but difficult to describe; in essence, everything takes place in

a gigantic virtual hotel containing millions of rooms, each offering a different experience. Many of the rooms are "owned" by the players themselves; each user has a private space that they can decorate with virtual furniture and in which they can socialize with friends. But many other rooms are operated by *Habbo Hotel* itself or its advertising partners, and these rooms feature simple games, opportunities to win prizes, and more. They also often contain branded items and large virtual billboards that, when clicked, lead you to an advertiser's Web site.
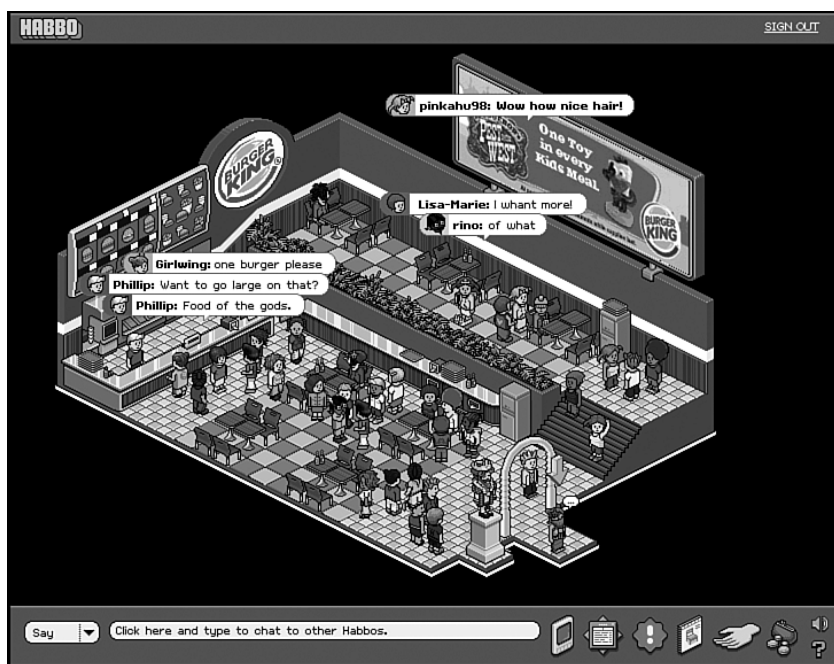
Figure 1.4   A Burger King–branded room in Habbo (Reprinted with the permission of Sulake Corporation)

Like *Solitaire*, our other "casual" case study, *Habbo Hotel* appeals to both males and females (51% and 49%, respectively), is easy to use, and is thematically inoffensive to just about anyone.

Like *World of Warcraft,* our massively multiplayer case study, *Habbo Hotel* brings many players together in a single virtual space, features customizable avatars and virtual currency, and encompasses a large number of different digital environments just waiting to be explored by curious players. *Habbo Hotel* has been described by its creators as a "gameless game,"[14] a place where people play together and are motivated in part by some of the traditional features of games (the opportunity to win "special" virtual items, for example), but where no unifying story or gameplay mechanic ties everything together. *Habbo Hotel* is as much a social network as it is a game, but people are clearly "playing" when they enter this virtual space. Role-playing, in particular, is a common activity. Players have been known to, for example, decorate a room as a police station, dress up like police, and pretend to monitor *Habbo Hotel.* Others have voluntarily re-created a McDonald's restaurant within the confines of their room and role-played serving hamburgers to lines of virtually hungry fellow avatars.[15] Of course, if players are doing this sort of thing voluntarily and without assistance, one wonders how McDonald's might be able to capitalize on the situation! User-generated content of this and many other kinds is ultimately at the heart of *Habbo Hotel,* and fostering it has proven key to the success of the game.

Habbo Hotel, like *World of Warcraft,* is difficult to truly comprehend without playing it for yourself. But unlike *World of Warcraft,* the barrier to entry is extremely low, which in part explains why *Habbo* has 86 million registered users. Sign up is free and takes seconds to complete. We highly encourage readers who are not familiar with *Habbo Hotel* or games like it to sign up and give it a spin. However, be prepared to not understand much of what the other players are saying—unless you're a teenager, that is.

Games and Virtual Worlds

The common thread tying together *World of Warcraft* and *Habbo Hotel* is that both take place in virtual worlds. After years of false starts—some readers may remember the "virtual reality" goggles and gloves of the early 1990s—virtual worlds are finally becoming a reality, thanks in large part to video games. These virtual worlds are almost exactly what they sound like—environments in which many players can interact with both each other and the environment, rather than spaces that necessarily attempt to ape reality.

Together, *Habbo Hotel* and *World of Warcraft* illustrate how different virtual worlds can be. *World of Warcraft* is a graphically impressive world full of beautiful scenery, in addition to a large population of elves, walking skeletons, and demons. *Habbo Hotel*, on the other hand, tends less toward graphical realism and more toward a stylized environment resembling a 1980s-era video game. Other virtual worlds might abandon the laws of physics, or skip human-looking characters in favor of talking animals and other make-believe creatures.

Regardless of their nature, virtual worlds are becoming increasingly popular, especially among the young. Recent trends suggest that by 2011, 54% of all U.S. teens and children will be using virtual worlds.[16] The trend is even more impressive in countries like China, where Internet-connected youths are nearly five times more likely than Americans to claim they lead a "parallel life" online.[17]

Although there are many interesting virtual worlds, a significant amount of corporate and academic effort is being poured into one world in particular: *Second Life*. Though not the largest virtual world by a long shot, with just under 600,000 unique visitors a month at the end of 2007, *Second Life* has managed to achieve a unique position in the minds of businesspeople and academics through a combination of clever features and terrific hype.

Launched in 2003 by Linden Labs, *Second Life* can barely be called a game, though it makes heavy use of video game technologies. In truth, *Second Life* is more of a giant virtual sandbox; it lacks an overarching plotline or theme, and unlike other games and virtual worlds we will discuss, effectively 100% of the content in *Second Life* is created by its users. These users can customize everything from the laws of physics to the color of the sky within the virtual territory they control—another significant point of differentiation between *Second Life* and other virtual worlds. *Second Life* also has a relatively unique business model; it generates much of its revenue through the sale and recurring taxation of virtual territory.

Figure 1.5   One of the more realistic-looking locales in Second Life
(© 2008, Linden Research, Inc. All Rights Reserved.)

A few key attributes have contributed to the early success of *Second Life*. First, it is free to basic users. This means that there is a large pool of potential *Second Life* visitors—as many as eight million,

though many do not return after their initial visit. Second, Linden Labs has provided a set of relatively simple tools that enable users to create their own content, ranging from T-shirts to skyscrapers to elaborate games, and has allowed users to retain the copyright on these creations. This has resulted in a flourishing online economy, priced in the local currency of Linden Dollars, which players use to buy and sell virtual items, buildings, and territory, among other things. Linden Dollars float against other currencies, allowing users to exchange real and virtual money freely, and enabling a small percentage of *Second Life* players to earn comfortable livings off their virtual work.

Finally, Linden Labs has embraced the corporate and academic worlds, encouraging a wide range of organizations to experiment in *Second Life*. Among these experiments are virtual ethics counseling sessions for British Petroleum employees,[18] product co-creation labs by Alcatel-Lucent,[19] no fewer than three official national embassies, campaign rallies for national political candidates, and a very large number of advertising efforts by companies ranging from Dell to Adidas. These advertising efforts, in particular, have come under increasing scrutiny as of late. Critics have called advertising within *Second Life* both expensive and ineffective, and companies focused on enabling advertising in *Second Life* have recently experienced financial difficulties.[20] We explore these criticisms in more detail in Chapter 4, "Adverworlds, *Second Life,* and Blurred Reality."

The verdict is still out on *Second Life* as a whole, but the popularity of *Second Life, World of Warcraft, Habbo Hotel,* and other virtual worlds in general is guaranteed to persist. Research company Virtual Worlds Management, for example, reports that over $1 billion was invested in virtual worlds from October 2006 to October 2007,[21] though a more conservative estimate would still be a staggering $500 million. As virtual worlds become increasingly popular, profitable, and easy to leverage by corporations seeking ways to entertain and connect with customers and employees, we expect their tremendous growth to continue.

Games and User-Created Content

One of the most important business lessons to be drawn from video games started, as such things rarely do, with Smurfs and Nazis. In 1983, one of the more popular PC games was an arcade-style game called *Castle Wolfenstein*. The object of the game was to sneak through a Nazi castle in order to retrieve secret war plans. Soon after the game was released, two suburban high-school kids managed to modify the game so that, instead of fighting Nazis, the player was fighting Smurfs, and the frightening shouts of the Nazis became the jaunty and ever-recognizable Smurf theme. It wasn't much, but *Castle **Smurf**enstein* represented the first well-known, user-created "mod" (short for modification) of a computer game.

In the quarter century since, mods and other content usually created for free by consumers have become critical factors in the success of video games. Consider *Half-Life*, an enthusiast game in which the player must escape an alien invasion. *Half-Life* was released in 1998, but a decade later almost 100,000 people a week are still playing a modified version of *Half-Life* called *Counter-Strike*. That's just one mod out of more than 570 created and made available by players of *Half-Life*.[22] All of these mods require the original game to play, which has driven sales of the original, decade-old game to more than 11 million units—an astonishing number in the enthusiast video game market.

What game companies have discovered is how to tap into the tremendous energy of user communities. To understand how potentially powerful these communities can be, look no further than the community surrounding *The Sims*. One major *Sims* user Web site, among several others, has more than 670,000 active members who have created more than 358,000 pieces of content for the game.[23] Those numbers are astonishing in their own right, considering the amount of free value derived by EA, the maker of *The Sims*. And this is not amateur or easy work. A survey of Sims modders found

that over half of all active modders spent more than six hours a week developing new content for free, and over 12% spent more than 20 hours a week.[24] Another economic study found that video game users also reduced costs for game companies by helping each other solve technical problems, to the extent that they solved 1,300% more problems than the paid support staff of the companies behind the games.[25] The power of video games to inspire communities is unquestionably one of their most compelling features. We discuss how businesses are leveraging this phenomenon throughout the book.

Games and Controversy

No introduction to the world of video games would be complete without an analysis of the controversy that occasionally surrounds them. Although games are frequently the subject of public scrutiny and debate, they are in reality not much different from other forms of media. (It seems ridiculous today, but the *Hardy Boys* books were once prominently described as equivalent to underage drinking, and likely to "blow out the brains" of the innocent boys who read them![26]) Critics, no doubt conscious of previously failed attempts to censor books, radio, television, and film, have attempted to differentiate their arguments against games by focusing on the interactive nature of the game-playing experience. Criticism typically focuses on one of two hot-button areas: violence and childhood obesity.

Violence: Games have been criticized as "excessively violent" for decades. Such criticism first reached fever pitch in 1992, when a popular game called *Mortal Kombat* enabled players to gruesomely slay an opponent by, for example, ripping off his head and holding it in the air while the spine dangled below. At the time of its release, *Mortal Kombat* was considered visually stunning, but its graphics pale in comparison to those of modern games. As the graphical fidelity of video games has improved, various social, professional,

and governmental organizations have expressed increasing concern over the potential impact of "realistic" interactive violence on children. These fears have been intensified by reports from organizations such as the American Psychological Association, which have claimed to link violent games to increased aggression inside and outside the laboratory.[27]

These criticisms have been rebutted by various prominent independent academics and organizations. Most notably, the American Sociological Association (ASA) and British Board of Film Classification (BBFC) recently issued reports supportive of the video game industry. The ASA noted that in the ten years following the release of games such as *Doom* and *Mortal Kombat,* homicide arrest rates among juveniles fell by 77%,[28] an especially notable figure given that video game usage skyrocketed during the same time frame.

The ASA also found that much of the research employed against video games had decontextualized violence. In the words of the report, "Poverty, neighborhood instability, unemployment, and even family violence fall by the wayside in most of these studies. Ironically, even mental illness tends to be overlooked in this psychologically oriented research. Young people are seen as passive media consumers, uniquely and uniformly vulnerable to media messages." Likewise, after performing its own extensive research study, the BBFC found that "far from having a potentially negative impact on the reaction of the player, the very fact that they have to interact with the game seems to keep them more firmly rooted in reality. People who do not play games raise concerns about their engrossing nature, assuming that players are also emotionally engrossed. This research suggests the opposite; a range of factors seems to make them less emotionally involving than film or television."[29] This conclusion—that video games might actually exert *less* influence on aggression than film or television—is especially remarkable in light of the importance and charter of the organization that produced it.

Critics of the game industry frequently leap to the conclusion that video games are the cause of any tragedy, such as the Columbine school massacre, that involves young men and violence. However, the fact is that the *vast majority* of U.S. males age 14 to 34 have played video games. If the mere act of playing a game is to be considered statistically significant proof of a causal relationship, then games can be linked to just about anything—including acne, adolescent flirting, and the rising cost of gasoline. We are more persuaded by evidence that the Columbine shooters had been subject to consistent bullying than by the underwhelming coincidence that they—like everyone else their age—had played games.

Our convictions on this subject are backed by a recent study performed by the U.S. Secret Service, which examined each of the 37 non-gang and non-drug-related "targeted" U.S. school shootings and stabbings that took place from 1974 through 2000, including infamous incidents such as the Columbine massacre. The Secret Service found that there is no "profile" of a school shooter. In fact, only 1 in 8 of the perpetrators studied by the Secret Service showed any interest in violent video games, and only 1 in 4 liked violent movies.[30]

Lastly, an often-ignored but key argument against critics of violence in games is simply that games have a prominent rating system, much like movies do. That rating system can be used by parents to filter the games they are comfortable exposing their children to—an acceptable solution given that 90% of games are purchased by adults over the age of 18.[31]

Apathy and childhood obesity: Video games have been accused of contributing to the obesity epidemic in the United States. These accusations have not generally amounted to significant pressure on the industry, because games are not clearly at greater fault than television watching or Internet use. And although some studies have claimed to demonstrate a link between game playing and obesity, the same studies have noted that turning off the TV or the video game console would not ultimately solve the problem.[32]

Ironically, parents and governments alike have recently begun turning to video games in search of a solution to the obesity epidemic. Take the case of *Dance Dance Revolution (DDR)*, a game that is played by stepping on an electronic dance mat in tune with various high-energy dance tunes. At more advanced levels, it is literally impossible to play *DDR* without sweating profusely. The game has proven so successful at motivating people to physically engage (and, as a result, burn calories) that schools all across the United States are now installing *DDR* arcade machines on their premises. In fact, more than 1,500 schools are expected to install *DDR* by the end of the decade. West Virginia alone has committed to installing *DDR* in all 765 of its public schools by the end of 2008.[33] Similarly, the Nintendo Wii, a video game console recently released in the United States, looks poised to potentially become a weapon against the obesity epidemic, as gamers fervently swing its motion-sensitive controller while playing virtual games of tennis, boxing, and more. Ten years ago, the ordinary person would likely have associated video games with obesity; ten years from today, games will most likely be an important component in the exercise regimen of children everywhere.

It is important to recognize that the controversies surrounding video games exist, and that critics of games can be extremely passionate and political. However, as we have explained, games are no more harmful to people of all ages than film or television. The game industry is large and mature, and has long since adopted a rating system that is no less reliable than that employed by films the world over. And game technology, which can be used in so many interesting ways, is no more inherently "dangerous" than the Internet—commonly criticized, but ultimately vital to society as we know it today. In short, businesses can and should take advantage of games, as long as they approach them with the same level of care and awareness that they would apply to other mass-market media.

Games and the Future of Business

That games have been the focus of so much scrutiny is a reminder of how ubiquitous they have become. But despite the fact that games are played at home, during commutes, and practically everywhere else by hundreds of millions of people, they remain an untapped resource for many companies. By contrast, those businesses that have seen games as more than just a diversion, and fun as more than leisure, have started to reap the great rewards of their insight.

This book is a rejection of the notion that "all work" must necessarily mean "no play." It is a picture of a changing corporate landscape; of a growing gaming revolution that will touch every aspect of our work lives, from how we sell products, to how we are hired, to how we do our daily jobs.

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