Chapter 1

The Market

KEY TOPICS

- Do We Enter the Market?
- Basic Considerations
- How and Which Niche?
- Market Analysis: Who Are These People, Anyway?

"Stop rushing products out the door!"

Richard Garriott, executive at NCSoft and creator of the *Ultima* series

You will notice a common theme throughout this book: Classic and retail hybrid online games are relatively easy, but persistent worlds (PWs) are very hard. Almost all publishers have classics and retail hybrids on the market. These have become a natural extension of classic board and card games, real-time strategy games, and first-person shooters. Adding Internet playability into an otherwise solo-play home game is an easy decision for executives to make, because most games these days are designed with that inherent capability. The tools, design issues, and other considerations to take into account when deciding to give a thumbs-up or thumbs-down to a classic or hybrid project are pretty well known throughout the industry.

When it comes to PWs, however, the situation changes dramatically. Let us repeat: PWs are *hard*.

- Hard to design
- Hard to build
- Hard to test
- Hard to support

PWs are also brutally expensive. Publishers eyeing the success of *EverQuest* (*EQ*), *Ultima Online* (*UO*), and *Dark Age of Camelot* are trying to determine whether they, too, can profit from the PW market. Some of these publishers will inevitably make poor decisions based on a lack of awareness of mistakes made by publishers of earlier games. We love these games and this business. We want to help minimize the number of poor decisions made along the inevitable way toward bigger, better PWs. Because of this, we've focused most of the text on the problems and considerations of creating PWs.

There are some other assumptions we've made that may seem somewhat patronizing: We've assumed that most people reading this book don't really have an understanding of what an online game is, who the audience is for each niche, or the considerations they should take into account when deciding whether or not to make one. We've made that assumption based on our personal experience over the past 16 years. Most folks in the development community, from the executive level on down, have never been involved in the hands-on development of an online game of any type.

Most development teams creating online games right now have worked on, at best, a retail hybrid game. Remember: The differences between the levels of complexity of classic, hybrid, and PW games are extreme. Failure to appreciate the differences allows enthusiastic and sincerely motivated development teams to earnestly sell executives on the benefits of developing games the executives wouldn't touch if they understood the differences. This happens a lot more often than you might think. Hundreds of millions of dollars since 1997 didn't get wasted by making Internet versions of *Chutes and Ladders*.

This first chapter is intended to give some basic information and advice, based on real-world experience, to those who are in positions either to propose the development of new online games or to decide whether or not to commit money toward developing them. What questions should be answered by or asked of an online game proposal? Where is relevant information found (and how is it presented) that will allow financial gatekeepers to make well-founded decisions on whether or not to actually spend the time and money on developing one?

Much of what you'll read in this chapter is going to look like Business 101. In truth, it is. It has been our experience that many companies entering this field do not do even the most basic research. If they did, they would realize that they are entering a market unlike any other. The most common mistake made at the executive level is not making an effort to fully understand the market, the players, and all the moving parts of both

development and post-launch management. When executives take the time to do this basic research, an enthusiastic and well-meaning development team proposing an expensive online game gets asked a certain set of follow-up questions. Executives who do not learn the basics of this market run the risk of being swept up in the enthusiasm of sincere programmers; in attempting to make their mark on the industry, some have committed Sagan-esque amounts of money to projects that might have succeeded if they had been subjected to more judicious and informed scrutiny. The *Late Show with David Letterman* has a recurring shtick in which various objects are dropped from a gravitationally significant height above an alley in New York. They plummet at high velocities and make their resulting marks on the pavement. Executives who do not learn the fundamentals of this market risk making their marks in analogous ways and learning the hard way that "rise" is only one of a number of words commonly associated with "meteoric."

This, more than any other reason, was the cause of all the high-profile failures in 2001. When you look closely at the one major success of 2001, *Dark Age of Camelot*, you will find a development group and management team with more than a decade of experience in online games who applied all the hard lessons they had learned about programming, customer service (CS), and player relations over that time.

Do We Enter the Market?

For all the excitement surrounding PW games and the semi-mystical properties they supposedly have for creating revenue, not everyone should necessarily get involved in all the market channels, or even in the overall market. These games take more commitment in money, people, and CS than the standard "fire and forget" retail unit; if you aren't prepared to make that commitment, why risk making a meteoric fall?

If you're still interested, then you need to understand the basic differences between the markets, which are covered in more detail later. Here's the big difference, however:

A PW isn't just a game; it is also a service.

Grind that idea into your head right now. It is another of the recurring themes of this book. If you don't understand what this statement means by the time you've finished reading the book, do not, under *any* circumstances, attempt to enter the PW market. You need to do more research first, until you understand what that one sentence really means.

Basic Considerations

The questions that most executives have been asking about PW proposals and projects are generally the same ones they have used with success in evaluating the viability and progress of standard retail games:

- What are we selling?
- To whom are we selling?
- What will the game cost to develop?
- How long will the game take to develop?
- What will it cost to get the game on the shelf?
- How much money is the game likely to bring in?

As more than a few publishers and developers found out the hard way in 2001, those questions are not nearly comprehensive enough to gauge the viability of a PW proposal. The questions list should look more like this:

- What are we selling on the gameplay side?
- What are we selling on the in-game community side?
- What are we selling on the out-of-game community side?
- Which of the three main player profiles are we primarily selling to?
- Are my developers experienced in PW games?
- What will it cost to develop the game?
- What will it cost to perform scaled testing of the game?
- What will it cost to deploy the network operators, hardware, and bandwidth at launch?
- What will it cost to ramp up and deploy CS and community relations personnel?
- How long will all this take?
- What will it cost to get the disc on the shelf?

- When do I amortize the service costs?
- How many months of service before I see a return on the investment?
- Which expensive consultants should I hire to tell me if the answers I get to these questions really are the right answers?

These are only the basic considerations. The more you know about PWs (also known as massively multiplayer online games or MMOGs), the better and deeper the questions you can ask. If there are good answers to your deeper questions, they will tend to be more complex and inter-related than answers to the simpler questions about simpler games. Yet, you have to do this digging, especially if you're considering plunking down several million dollars. There is a difference between leaving your footprint on the Sands of Time and leaving a splatter pattern on the pavement outside David Letterman's studio.

How and Which Niche?

No one seriously doubts that PW/MMOG-type online gaming is going to grow as a market. Analysts and industry experts differ on when and how fast, but the evidence is clear—the next big market sector expansion is going to come in this area. For that reason, nearly every game publisher except Nintendo has short- and medium-range plans to get into the PW/MMOG market sector. For its part, Nintendo's representatives have stated publicly that they just don't see the need right now, with the console online market just getting started. However, they reversed course in April 2002 and announced that the GameCube would, indeed, have Internet access capability by the end of the year and that Sega would be porting online games *Phantasy Star I & II* to work with the GameCube.[1]

The "traditional" online gaming market is actually three separate and distinct market segments with only a little bit of crossover among them. The following definitions will help you to make good decisions on what to develop and how much to spend.

1. See "Nintendo to Link GameCube to the Web," Bloomberg/Tokyo, *Taipei Times*, April 4, 2002.

The Classic Games Market

Represented in this market are games familiar to just about everyone, such as chess, poker, hangman, spades, Hasbro's *Risk*, *Scrabble*, backgammon, and hearts. We might not be experts in these games, but most of us know at least the basic mechanics of play.

These games have become commodities, offered for free play on aggregator and portal sites such as Yahoo!, Internet Gaming Zone, and the like.

It is hard to make any money from this market segment. Current game sites and portals are using these games as loss leaders in attempting to attract enough people to charge decent advertising rates for page views.

The Retail Hybrid Market

These are games exemplified by *Quake II*, *Unreal Tournament* (*UT*), and *Age of Empires*. These games not only feature solo or standalone home play, but they also connect to the Internet for multiplayer action in player blocks that range from 2–64 players per game session. The average number of players allowed per session is somewhere between 8 and 16, depending on the game's design. Real-time strategy games and first-person three-dimensional (3D) shooters dominate this category.

The retail hybrid concept has also become a commodity. While the player does have to buy the retail unit, the games can then be played in multiuser mode online for free.

The PW Market

This sector is exemplified by games such as *EQ*, *UO*, and *Dark Age of Camelot*. The key differentiators of this category are as follows:

- The games feature a PW, in that the player creates a character, persona, or handle that identifies him/her in the game and which can be grown and altered over a period of time. In *UO*, this is represented by a character whose skills and possessions grow with playing time. In *Air Warrior*, it is represented by a character's kill/death ratio.

- Another differentiator is that PWs are currently the one measurable working business model in online gaming due to the monthly subscription model. Players who subscribe to these games tend to stay in them—and pay for them—for months or years. Basic subscription fees range from $9.89 to $12.95 per month, and are trending upward.

Market Analysis: Who Are These People, Anyway?

If you've been in the video/computer game market for a number of years, you probably feel you know the market pretty well, you have a good handle on who the consumer is, and you understand what consumers want and what their buying patterns are. If you bring this hard-won market information to bear on the online game sector, however, you will be somewhere between significantly and utterly, horribly wrong.

Online players buy computer and video games, of course, but the online gaming market must be treated separately from the standard video/computer market. This is especially true for the PW sector, though a little less so for hybrids such as *Half-Life*, *StarCraft*, and *Quake Arena*. The key here is the differing objectives: Home players are looking for a good solo experience, while online players are looking for opportunities to have a good time competing and/or cooperating with other humans, as well as socializing. (We'll revisit socializing later—it is hugely important to your success and it doesn't mean what you probably think it means.)

Based on current Internet access statistics and game buying patterns researched by the IDSA and research analysts at groups such as Forrester, DFC Intelligence, and Dataquest, there are at least 100 million people in the US who play some form of video or computer game occasionally. On the broader world market, that may extend to as many as 300 million. Of these, maybe as many as 100 million actually play some form of online game regularly.

The Three Markets

Based on our experience in the online services industry going to back to 1986, the online game market is divided into three broad consumer segments: hard-core, moderate, and mass-market. As of January 2002, virtually all gameplay takes place on

a personal computer (PC), with a very small number playing Dreamcast console games online. There are no major PW clients for the Apple/Mac at this time. (The client is the software installed on the player's computer. It is required to access and play the game.)

The Hard-Core Market

Hard-core PC gamers may be relatively small in number, but do they ever spend a lot of time and money on their hobby! Reliable estimates put the number of these players at between at least 4 million and possibly as many as 6.5 to 7 million in the US alone, of which at least half play either PWs or retail hybrids regularly online. The total worldwide may be as high as 15 million.

It may be helpful to think of these players as typical technology "early adopters." They'll play anything, anytime, but they prefer the more complicated, challenging games. They tend to try each new market offering, at least in open, free Beta tests, and are much more forgiving of technical instability and bugs than the moderate or mass-market consumer. The hard-core player plays a lot—it is not at all unusual for them to play 20 or more hours per week. They are a relatively small percentage of the consumer base, but they have wide open pockets for a game they want to try or (in the case of subscription-based PW games) a game they want to keep on enjoying. It is the hard-core PC game players who have been behind the success of products like *EQ*, *Diablo II*, *UO*, and *CounterStrike*.

The Moderate Market

Moderate gamers are the great untapped market segment of online game players. These consumers tend to spend substantial amounts of time and money on games, but are often slow to adopt new technologies/products. Their population is more difficult to estimate than that of the hard-core segment. We believe there are probably 15–20 million people in the US that fit into this category and perhaps double that worldwide, of which maybe half actually play or have played an online game of some kind.

At first glance, moderate consumers look much like hard-core players: They spend quite a bit of money on video and computer games and tend to play quite a bit on a weekly basis. The difference is that many of them are actually afraid of getting as involved as their hard-core counterparts; they know what a time and money drain hard-core online gaming can be. Some are constrained by the financial aspects, afraid of spending more money than they think they should. Some are similarly concerned

about spending more time than they (or their parents, spouses, or others) think is psychologically healthy and/or generally prudent on a game. They are often sensitive to monthly subscription price pressure and thus are less likely to stay with an online game unless it works extremely well at launch.

The Mass-Market Segment: The Horde

Mass-market consumers tend to prefer playing games that are easy to learn and short in duration. They grew up on familiar card, casino, and word games, such as poker, bridge, and various forms of trivia, and also on social board games, such as *Scrabble*, *Monopoly*, and *Risk*. It seems likely there are at least 70 million of these consumers in the U.S., and from 140–200 million worldwide. The current mass-market online game niche is probably around 35 million in the US and 60–100 million worldwide.

The three player markets are best expressed as a pyramid, as shown in Figure 1.1, with the high-paying hard-core players resting at the apex. From a marketing perspective, the most important point is that there is little movement between these online gaming population groups. Think of the overall game-playing population as a pyramid, with the mass-market gamer at the base and the hard-core gamer at the top. As a general rule, about 70% of the game-playing population sits at the base in the mass-market gamer category. Somewhere between 15–20% rests in the moderate gamer middle area, and the rest are the hard-core gamers. For ease and conservatism, we've rounded off the hard-core players to 10% and moderates to 20% of the overall market.

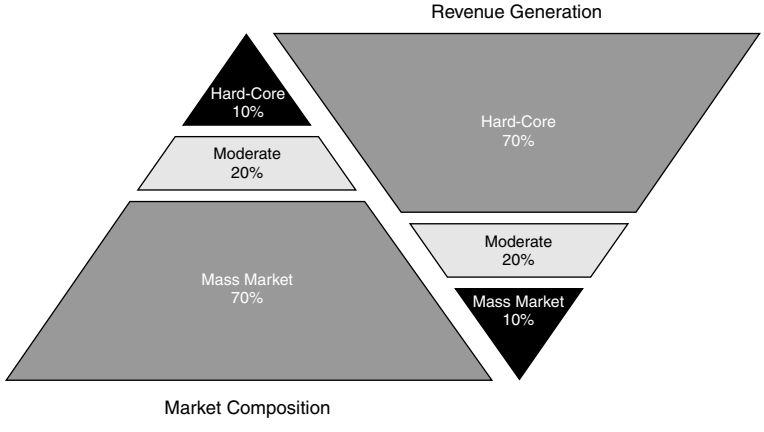

Figure 1.1 The Pyramid today.

Historically, there has only been about 10–12% movement between the groups, meaning, for example, that only about 10% of the moderate group has been willing to step up to the hard-core group, either temporarily or permanently, or that only about 10% of the mass-market group has been willing to take the plunge into the moderate group. What is more likely to happen is that a mass-market or moderate gamer will stick a toe in the water to test the next higher niche, but remain in his/her market group. Much of this is due to the fact that most online games are developed by hard-core gamers for other hard-core players.

On the obverse of that, play movement down the pyramid is inclusive, meaning that hard-core gamers will play products suited to the entire pyramid while remaining hard-core gamers, and moderate gamers will certainly partake of mass-market games while remaining in the moderate group.

It is that low upward movement on the pyramid that typifies revenue generation for both second- and third-generation online games. Traditionally, the hard-core group at the top of the pyramid has represented 70–80% of the available revenue. The hard-core gamer will spend whatever it takes in time, money, and dedication to enjoy an online game, especially a PW game. These people are fanatics; if multiplayer tic-tac-toe is all that is available, this group will try to power-game it. For the past 16 years, they have provided the income that has supported the development of new online games.[2]

That approximate 70–80/10 revenue rule still applies today. However, advances in technology and the continually dropping expense of a game-capable PCs are broadening the opportunities for publishers, offering the potential to move those percentages to 80/20—in effect, a potential doubling or tripling of the revenue generated.

How? First, the game player niche market percentages may remain the same, but the total overall size of the market will continue to grow. Currently, only about 8% of the world population, or about 514 million people,[3] are connected to the Internet. Given

2. As a case in point, note that the original *AD&D: NeverWinter Nights* PW game on AOL brought in between $5 million and $7 million annually from 1992 to 1997. This happened even though the technology was based on SSI's Gold Box *AD&D* series, which featured EGA graphics and basic SoundBlaster driver support from even earlier games at a time when SVGA graphic cards and SoundBlaster 16 bit or 32 bit with AWE were the standards. The facts that the game had good depth and breadth and that the world and characters were persistent were its key success factors.

3. Source: NUA Internet Surveys. See `www.nua.com/surveys/how_many_online/index.html` for a continual survey of worldwide Internet access by region.

current growth rates of about 30–40 million new users per year and the potential of new and less costly Internet-capable game consoles and interactive TV set-top boxes to expand the market, that percentage seems certain to rise to at least 10%, or 600 million users, by the end of 2005, with a reasonable chance of rising to one billion Internet users, or about 15% of the world population, in that time. Effectively, we could see a doubling of the available market in five years.

Additionally, with the moderate niche being double the size of the hard-core group, as well as being willing to spend quite a bit more money on gaming than the mass-market group, this group is becoming a key target for online game publishers. Publishers are beginning to plan their game designs and technology requirements around retaining the hard-core group while making a broader appeal to the moderates. The idea is to be more inclusive and encourage more moderate gamers to at least test-drive the upper-range products.

Important note: It won't matter how large the total market grows if you base your games on Western mythology and deliver them in English only. Will it matter to you how many millions of Chinese have access to the Internet in five years? They won't be playing your game unless you plan and design for it.

Player Lifecycles

The key to extending the life of an online game to encompass years is to understand the four phases of the unique player lifecycle and how to attack the weaknesses of each phase. Figure 1.2 is a representation of the four-phase PW player lifecycle.

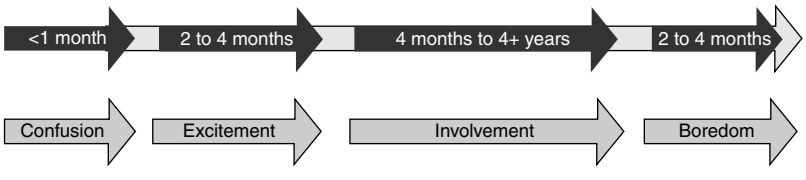

Figure 1.2 The ideal PW game player lifecycle.

Each of the phases requires some explanation:

- **Confusion—**Historically, this is where the most churn develops, after the initial rush of early adopters, during the two- to three-month "honeymoon" period after a game's launch. New players often don't read documentation or do online research on how to get the most out of a game, so when they enter the game for the first time, there is an element of confusion about how the interface works and what actions to perform to advance their character's skills, weaponry, money, and so forth.

  If the subscriber does not receive enough guidance and human contact during this period, he or she will most often quit, as fully 90% of the industry's churn occurs during this phase. New players who receive effective help within the first hour of play have a 90% chance of staying for two to three months. If the new player receives human guidance quickly, chances are very good that he/she will become "hooked" and move on to the next phase.

- **Excitement—**The player is primarily there for the game, as he/she now understands how it works and how to advance within it. At this time, he/she is also making more personal, societal contacts and learning more about the background story of the game. This phase lasts between two and four months. If the player makes sufficient community contacts (joins a guild or team, or has a regular group of in-game friends he/she plays with), he/she will generally move on to the next phase.

- **Involvement—**This is the longest subscription period of the player lifecycle and is hinged on community involvement. If the player becomes attached to an in-game micro-community (guild, team, what have you), that micro-community generally becomes involved in the meta-functions of the game, such as an ongoing story plot, holding team events, and so forth. Players who move into the involvement phase normally subscribe to the game for a period of years. For example, about 25,000 of *UO*'s original 100,000 players, who started their involvement in 1997, were still subscribed to the game in late 2000.

- **Boredom—**At some point, all players will become bored with a game, regardless of the strength of the community. If they cannot be recaptured through new content or features, they generally churn out within two to four months of boredom setting in. In some cases, they may hang out for quite a while longer with their friends in the game, if the teaming and chat features are sufficiently strong.

So, with PWs, it isn't just a case of matching up a new game idea with an identifiable market demographic and pushing forward; before you even make a decision, you have to be thinking about what is going to happen months and years after the game is launched.

The Four Keys to Success

The four keys to success in this industry are preparation, execution, testing, and follow-through, which probably seems like unnecessary Business 101 to most of you. The plain fact of the matter is, however, that online game developers violate this common-sense four-step process regularly.

Developers are generally creative people who got into the industry to create games; they are also young and inexperienced as a whole. While you may understand that phase one, preparation, is the key to success throughout the whole process, your team is anxious to get to phase two, execution. As discussed elsewhere in this book, almost every online game team gives a passing nod to completing preparation (the design), but generally moves into development (execution) as fast as they can get there. They want to see how some of their ideas actually work, and fast. "Making" is fun; "complete planning" is not.

While passion and enthusiasm are necessary to any endeavor, starting the coding process (execution) without a complete thought down on paper is just asking for trouble, and trouble usually obliges. (The word "architecture" is often used in conjunction with the word "software." Game software is sometimes designed by teams of people who have not made the neural connection between the facts that: [a] few, if any, buildings designed by Fuller, Wright, Pei, etc. [or even Gaudi] have fallen down, even though [b] those creative people went through the tedious exercise of actually drawing the buildings in detail, on paper, before breaking ground.)

Of these four principles, follow-through is observed mostly in the breach and the other three are incompletely followed.

Preparing Means Completing the Design Before Coding Begins

Online games are an organizational nightmare. Even something as relatively simple as a retail hybrid can become significantly complicated in the multiplayer design phase because of tradeoffs between making the interface and inter-player communications simple enough to use to attract players yet "full featured" enough to be competitive in the market.

Unique to the game industry, everything done in an online game has a ripple effect that can reach out and bite players long after the game is launched. Like dropping a pebble in a pond and watching the waves ripple out to the other side, one wrong decision (that might take only seconds to make) made during the design phase of a project can create months of unanticipated work down the line. Early in an online game project, wrong decisions are generally related to not truly completing the design documents before beginning the coding. Almost every online game has finished the design *after* execution has begun, resulting in increased development and testing periods. In general, when more attention is given to thorough design, less time (and consequently, less money) is required to code and test that design. Keep in mind that the execution, testing, and follow-through stages will be built on this design document and will involve every department from marketing and testing to CS.

As far as we know, every major and most of the several minor online games launched since 1997 finished the design of the follow-through tools and procedures after testing had begun. In many cases, products were launched without final code for support features. They weren't adequately prepared to serve the customer, and you can imagine the results: lost customers, bad word of mouth, and millions of dollars left on the table.

Design for the *Real* Market Every online game has been designed for one niche: the developers. You can't just design a game developers want to play; they are a niche market with easily readable preferences. A well-designed game allows for new players *and* features that attract several types of players (see Part II, "Design and Development Considerations").

Design the Change Control Process Before You Begin Coding Without a change control process (CCP), there is no way to avoid cowboy coding, nerfing, the neat stuff syndrome, and other problems you'll read about later. Immature procedures and the absence of a process for change control are two of the top problems in the online game industry today. It would not be exaggerating to say that they are among the major contributors to subscriber churn in PW games.

Executing Means Developing

And developing means sticking to the design. The design is a roadmap with a route clearly marked. This is the route to be followed, not the optional exercise some development teams make it. Inexperienced programmers overlook the fact that every change has a ripple effect.

Following the design doesn't mean you can't be flexible when the need arises. Occasional changes to the design may be required, especially when technology standards change. Use the CCP to modify the design when necessary.

If something must be scaled back, never put the follow-through tools or service technology on the cutting-room floor. Every PW that has done so has paid a heavy price.

Testing: It Isn't Design!

What the testing phase is not: This phase is *not* for adding neat new features and systems that weren't included in the design. Other online games were forced to do this due to the lack of a finished design. This resulted in an imbalance between systems and overall system instability.

What the testing phase is: Testing is for checking the design implementation, increasing system stability, testing simultaneous player load limits, locating (and fixing) bugs, and game balancing.

Follow-through: The Software Is a Service

Part III, "Launching and Managing a Game," will deal with this concept at length. Here are three good guidelines to keep in mind as you decide whether or not to press forward with your project:

- **Customer service—**Players want you to deal with them honestly and with integrity. They want you to have two-way communication in-game, by telephone, and on the web.
- **System stability—**Players want a reliable system that is up and available for play as much as humanly possible.
- **Retention—**Honest, prompt CS and good technical stability that maximizes game up-time are the two best retention factors.