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# CHAPTER ONE

## Introduction

### 1.1 The Changing Tide

A few years ago, the war looked like it had been won. Microsoft and Sony had divided the gaming public into two hostile camps. Nintendo's Wii managed to widen the traditional audience of core gamers to include families, expanding the target audience to both younger and older prospective players. Instead of accepting third place behind Sony and Microsoft's superior hardware, Nintendo took simpler game mechanics and cheaper hardware and proved that they could expand gaming into a more mainstream market.

In the meantime, while the three console manufacturers continued to focus on living-room experiences, fans lamented the supposed death of PC gaming. Games like *Halo* and *Call of Duty* had moved the traditional first-person shooter (FPS) and action markets towards the consoles, but millions of new players flocked to PC-based online experiences. In particular, 13 million of them happily shelled out \$15 a month to Blizzard to play *World of Warcraft*, and hundreds of thousands more subscribed to a half dozen or so of the less-successful Massively Multiplayer Online (MMO) games. Most of these MMOs danced happily in the wake of early innovators like *Ultima Online*, *Meridian 59*, and *EverQuest*, and even more ancient MUDs, MOOs, and BBS games, forgotten by all but the old sages of game design. The death of PC gaming turned out to have been exaggerated, and the PC remained a viable platform for game development, albeit one that now needed to offer a different type of product with a different business model. The war for the hearts, minds, and—more important—the pocketbooks of gamers seemed likely to settle into a comfortable four-way victory in which console manufacturers competed with one another for an expanding market and PC gamers subscribed to one or two of the big MMOs.

However, a quiet, powerful new force was germinating, heralded by companies like PopCap Games and led by a vanguard of strange, cheap, lo-fi experiences with names like *Habbo Hotel* and *Second Life*. Games like *Puzzle Pirates*

and *Bejeweled* demonstrated that there was room for innovation in smaller, more casual games: games for gamers who didn't have hours each day to devote to their hobby. More and more Flash-based games, built to take advantage of the increasingly high bandwidth of the ever-expanding World Wide Web, appeared on the scene, providing users with quick, cheap experiences just a click away from their favorite website. Yet few of these games made much money or attracted serious notice.

Then, in 2004, a brilliant misfit from Harvard named Mark Zuckerberg turned the geography of the battlefield upside down. A cynical loner, at least according to the award-winning biographical film *The Social Network*, Mr. Zuckerberg managed to take the principles first illustrated by sites like MySpace and transform them into a global empire that connected us all with first our fellow students, then our social circle, and eventually our long-lost friends, family, their neighbors, and even some pets. In so doing, Facebook manifested a new breed of platform that appealed to a new, much larger and diverse user base, rocketing the world of “gaming” far beyond old console or MMO crowd, and even past the expanded living room audience the Wii commanded. The socially “sticky” elements of the platform made it easier to encourage friends to make connections, join in the fun, and eventually to play the games. Despite having been first imagined as a platform for Harvard University students, Facebook quickly expanded to accommodate other college students, who signed up by the tens of thousands. In 2006, the network was opened to anyone over the age of 13. Within two years, the site had more than 100 million registered users.

Beyond just sending messages to friends and posting pictures, huge numbers of these Facebook users began to use the platform for gaming. More interesting still, many were not people who traditionally spent money on console, handheld, or MMO PC games. Online social networks made a whole new breed of gamer possible, a gamer who wanted to play in bite-sized chunks, in those brief moments while they were online, checking on their friends or updating their own statuses. Many would never have considered spending \$60 on a retail game but seemed quite comfortable parting with \$2 or \$3 per day to play games like *Mafia Wars* or *Farmville*. Facebook didn't change just the demographics of gamers; it changed the economics of gaming.

At the same time, the rapid adoption of smartphones—notably Apple's staggeringly successful iPhone line—gave millions of users a new way to play online games, and a second, even handier mechanism through which they could “connect” with their friends. These devices let users make calls and text, sure, but they also accessed email, connected to the Internet, and allowed the user to purchase “apps” that, due to their low (or no) price and abundance of options, helped the user tailor their smart phone to their unique needs. More like tiny handheld PCs, these devices delivered thousands of games, dressed up like “apps,” which could be played on the phones themselves. More important, they swelled the number of users who interacted with Facebook and the number of hours those users *spent* on Facebook, driving the site to host more

than 600 million users by the beginning of 2011. Once “apps” became games, devices like the iPhone began taking huge chunks of market share from traditional handheld gaming devices like the PlayStation Portable (PSP) and the Nintendo DS (NDS). Handheld devices manufacturers have countered this trend by introducing technological gimmicks like stereoscopic 3D (in the case of the Nintendo 3DS), or ever more full-featured interfaces and software suites (as with the PlayStation Vita), but it's unclear whether these efforts will save the market for dedicated handheld gaming devices. Social gaming via full-featured smartphones has proven its power and increasingly appears to be the dominant mobile platform going forward.

By the beginning of 2012, the clearly defined battle lines in the console wars and the massively multiplayer online role-playing game (MMORPG) dominance of PC gaming looks to have become a fractured free-for-all in which upstart companies like Zynga can go from unknown shops to media powerhouses having more than 250 million monthly users (in Zynga's case, a journey that took them fewer than 1,000 days). Most game designers are no longer able to focus on designing their game for just one system. Even console products are now expected to have social tie-ins, both on Facebook and on mobile platforms, in an effort to drive customer awareness and customer engagement.

This book explains how the gaming industry arrived where it is today by giving an overview of the major phases of its evolution. We'll discuss the way in which early games were marketed and monetized. We'll talk about how early BBS games and MUDs evolved into the sophisticated subscription-model-based products that World of Warcraft and its competitors have become. We'll study the rise of free-to-play models in South Korea and China brought about by an effort to circumvent rampant piracy. You'll learn how those games managed to retain their customer base by adopting western designs, but simultaneously fitting into the Internet café culture of rented PCs, where users pay a few renminbi (RMB) per hour to smoke cigarettes and while away the hours on first-person shooters and MMOs. We'll look at how these games ended up paving the way for much of what the West currently understands about microtransaction models (in which users get the client software for free, or at very low cost, and are asked to pay small fees for in-game items, perks, or services). We'll study the different generations of Facebook games in greater depth and devote a little time to looking at some of the other social media networks, both the all-but-forgotten and the up-and-comers. We'll study popular mechanisms for acquiring users, popular dual-currency models, and methods of monetizing users once you get them. We'll look at how to put the right kinds of hooks in your games, gather the right kinds of metrics, and evaluate that information to increase the game's overall stickiness and revenue per user. We'll look at games like *Magic the Gathering* and how it influenced a generation of online collectible card games, and at other games on platforms ranging from the iPhone to Facebook, to help further illustrate some of our key lessons.

We'll spend time demystifying the alphabet soup of industry terms that have sprouted up around social game design and monetization like brambles around a castle; we'll teach you how to cut through the jargon to reach the treasures that await within. Confused by DAU, MAU, ARPU, PCU, ARPPU, and the rest? By the time you finish reading this book, you won't be. Would you like to know what social game designers mean when they talk about “whales” or “gold sinks”? We'll teach you. Whether you're a game designer trying to beat out Farmville, a studio manager looking to take your company in a new direction, or an investor who wants to better understand the financial opportunities in this brave new space, we'll better prepare you to navigate the maze.

Next, we'll dive deep into the different strategies for monetizing games. This isn't a book about how to make “great” games; this is a book about how to make money through brilliant design, flawless execution, and painstaking iteration. As such, we'll spend a lot of time visiting the different mechanisms for giving users the types of experiences they're willing to pay for. Different approaches can vary in effectiveness for different genres of games, so we'll look at a number of common types of games, both those that treat games as a service and more traditional, one-time purchase products. (If you're still in the console biz, there are ways to further monetize your retail customers ... if you're clever!) We'll talk through episodic content, advertainment, and optional subscription models.

The sale of virtual goods made more than \$7.4 billion dollars in 2010. Yeah, that was billion with a “b.” So we'll spend a lot of time studying how your game can get a piece of that pie from markets in Europe, North America, Asia, and even in emerging markets like Russia, Brazil, and Turkey. We'll talk about how to combat the illegal sale of virtual goods that you *don't* want freely traded and how to charge for those you *do*, either with single, dual, or more complex currency systems. Finally, we'll talk about some of the more interesting balancing issues associated with managing game economies.

Along the way, we'll consult industry thought leaders—those who design and produce the games, run the shops, analyze the metrics, and make the deals that motivate these exciting new sectors of the market. Each of these luminaries will discuss one of the previously mentioned topics in a Q&A interview format.

At the end of this wild ride, you will know the history of game monetization, from the first cartridge-based games sold through retail in 1981 to the most innovative online social game monetization tricks from 2011. You'll have a superb working knowledge of industry terminology, both for retail products and for the new-language jargon of MMO and social game metrics and user-tracking data. You'll have learned how more than 50 different games fit into the tapestry of the marketplace, how the companies that create and publish them have sought to innovate, and which have won (and lost) in this high-stakes business. You'll understand the overlap between console, mobile, handheld, PC, MMO, and social games, and how to evaluate success in each of these market segments. You'll also understand the ways in which the lines can be blurred

between these types of products, and what design elements can be harvested from major successes in each area to be applied to other types of games. You'll understand the interplay between Asia and the West and why different types of design features work better in different territories. You'll know about the also-ran social networks that pioneered the model that Facebook currently owns, and you'll be familiar with the newcomers worth watching, both in North America and in emerging markets like Brazil and Turkey. Finally, you'll have been exposed to a dozen or more game design techniques for making your social games attract users; you'll know how to make money from them by providing superior play experiences and how to retain those players so they don't lose interest and go spend their dollars elsewhere. When you're done, we'll point you to a website and (of course) a Facebook page where you can visit with other designers, product managers, and investors interested in continuing this discussion in an online forum so that the conversation can continue to evolve as new trends and new games appear on the scene.

## 1.2 What This Book Is Not

This is not a book that will teach you how to program games. Even if you are already a skilled engineer, this book will not teach you how to write code for social games. There are many fine books on the market that deal with these types of topics.

This is not a book about project management (though we have written those). In order to build high-quality social games, you need expert producers, development managers, and skilled team leads. You also need a process that works for your staff, be that Scrum, Lean, old-school waterfall, or something altogether different.

This book will not teach you how to lead teams effectively. (We've written a book on that topic, as well.) You'll need to know how to do this—to have a blend of intelligence, charisma, and wisdom that would do a cleric proud—in order to successfully build social games. But we simply don't have the room to teach those skills here.

This is not a book that pretends to teach you how to build a social game in three days or even three weeks. Although such a feat may be possible, we doubt it. In any case, we believe the best games are built over time by teams led by expert professionals who have a proven track record in making great games.

However, if you are new to game development, do not despair. This book will teach you a great deal about how to think about games as products, how to consider design choices as both a game designer and a businessperson, and how to evaluate your game against the market.

Finally, it's worth mentioning as a caveat that this is an incredibly rapidly evolving space. In the time between when we began writing this book and the

second draft, there have been two major acquisitions of major players in the space, an IPO announcement that shook the foundations of the social gaming sector, and the introduction of a brand-new social network that might well change the rules of the game. This book was written quickly, because we know you need this information in early 2012, not early 2013. As a result, many topics may have depth sufficient only to give you an idea of what to look for; it is our hope that this volume will spark discussion and inspiration amongst the community and that we can all continue the conversation online in the coming months and years.

So let's dive in.

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# CHAPTER TWO

## What Is a Social Game?

### 2.1 Meet Your Competition

There's a strong temptation to imagine that social games should be narrowly defined to include only those games that have infiltrated Facebook, mostly courtesy of Zynga. Certainly, many of those games set the gold standard for profitability in online social gaming. These games are played by more than a hundred million users per day, according to various metrics-tracking websites. They make a fortune in microtransaction revenues every day. At the time of this writing, Zynga has announced their upcoming IPO (an event that in all likelihood will have occurred by the time you read this) and is busy buying up game studios in cities from Austin to Antwerp. So in sitting down to write this book, we wrestled with the question: should we stick to an analysis of how to design Zynga-like games for Facebook and call it a day?

No. Such a study would have limited utility and would cease to be topical the minute a new social network eclipsed Facebook, as will undoubtedly happen...eventually. (Google+, perhaps?) Moreover, as many companies and investors are discovering the hard way, it is extremely difficult to succeed as a “fast-follower” in a space that already moves with a speed and agility that would make a falcon jealous, in an industry that seems to reinvent the “core experiences” it offers to the user every nine months. An intimate dissection of *Farmville*, *Vampire Wars* (already moribund, if the statistics are to be believed), and *CityVille* might remain current for the next year or two, but little more, and it would be extremely difficult for the lessons learned in such a narrow study to help guide the reader's steps over the next decade.

Instead, let us define social games a bit more broadly, and hopefully in a less arbitrary fashion, in an effort to glean broad principles that will apply to

game design and monetization in the next decade as well as in the next year. To do this, we'll look at a few “social games” from the previous two decades (yes, there are some!) and hopefully offer an inclusive definition that is still sufficiently narrow that we won't end up talking about all games on all platforms throughout all of gaming time. Here's the definition we've agreed upon based on our own understanding of the market and an analysis of the types of games that we believe will benefit you over the course of reading this book:

*A social game is one in which the user's interactions with other players help drive adoption of the game and help retain players, and that uses an external social network of some type to facilitate these goals.*

Let's indulge ourselves in a quick dissection of the definition. To be a social game, we believe that you need to encourage users to interact with one another. This interaction needn't necessarily be in a real-time, synchronous manner. In fact, in many of the games we'll study, user interactions are tangent to the core gameplay. But a purely single-player product without any way of communicating, assisting, or thwarting other players just isn't going to qualify as social. (However, we may still explore one or two cases in which they nicely illustrate elements of game design that we think can be applied to the social gaming space.)

We believe that new player acquisition and retention are two of the most important things to consider for any game. This consideration is even more critical in games in which your users didn't have to pay you for the product initially. So called “freemium” games, whose business model is almost synonymous with social gaming, return money only to the degree that they keep passing users through their funnel and keep them coming back.

Finally, we want to draw a distinction between games that create their own social ecosystem within the game and those that leverage external social networks to achieve their ends. As we'll discuss, there are many types of social networks, from those that explicitly identify as such to far looser collections of communication features that simply help bring gamers together. Some games can create their own external social networks as forums or through other types of community building, though—for the most part—the most successful products in this space leverage the power of existing social networks to drive user throughput.

So, armed with a definition that can at least serve as a field guide to identifying the types of games we're most interested in talking about, let's move on to an investigation of the history of social gaming.

## 2.2 BBS Games and MUDs

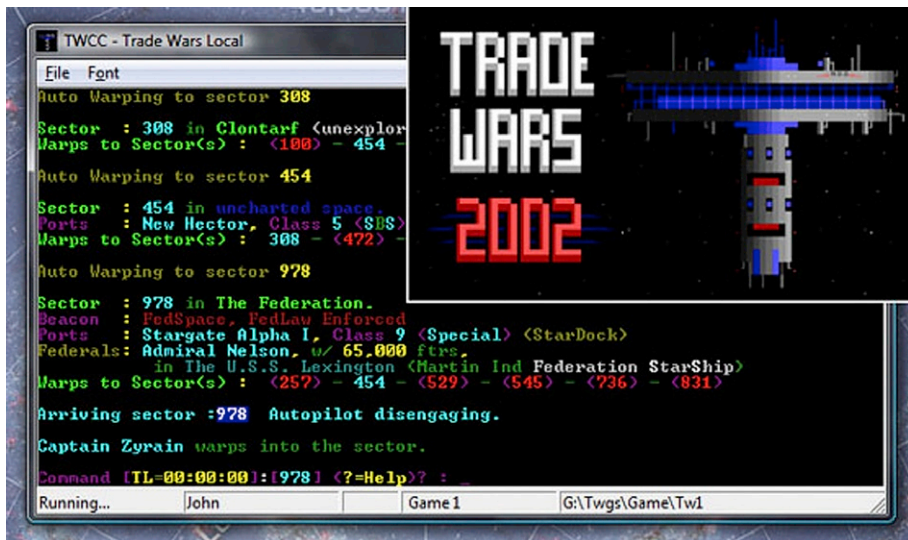
A few early examples of social games can be found by digging through the histories of early BBSs (Bulletin Board Systems). These were protowebsites, effectively text- or ASCII graphics-based social networks hosted on individual



machines or small computer clusters and typically accessed via dial-up modems. In the mid-1980s, before much of the world had even heard of email accounts, these BBS systems acted as basic mail servers, discussion forums, and central hubs for uploading and downloading files. They also had games. These were games that required a great deal of imagination, but also took advantage of a medium in which different users could log in and play their turns at different times of day or night (because being online tied up a phone line, many BBSs could have only one user online at a time). In games like *Ole West* and *Legend of the Red Dragon*, users would log in, be given a fixed number of turns per day or hour, and take their turns in a world inhabited by other players (albeit asynchronously).

For the few hundred thousand early adopters who happened to understand things like baud rate and the BBS concept of doors, these games offered a first glimpse at the world to come. They featured early leaderboards—and even ways to taunt other players. By most standards, these were the first online social games because they used interactions with other players to drive adoption of the game (users showed up on the BBS to download a file or ask a technical question, then saw dozens of posts about in-game events and were thus enticed to begin playing). Players dialed in every day (sometimes “wardialing” with modem software that would automatically keep dialing the BBS phone number in the hopes of getting through the minute it stopped being busy) to get those precious ten or thirty turns, because that was the only way to stay ahead of your friends or help out your corporate team in venerable groundbreaking games like *Trade Wars*. The social element made the game “sticky”—users came back, again and again, to stare at those 16 colors of text that transported them to fantasy worlds, to the Old West, or to the depths of space.

Simultaneously, MUDs (Multi-User Dungeons) pushed these concepts further, allowing simultaneous play in which dozens or hundreds of users could coexist in the game world, interacting with one another in real time. Many MUDs did away with the concept of limited numbers of moves or turns per day. MUDs typically featured turn-based play, in which turns passed at a fixed rate (called “ticks”). The MUDs required access to university mainframes or networks, or private servers on which users would pay for access and connect to using Telnet clients and later custom MUD clients that enhanced the experience by parsing information from the MUD server, translating the information into more user-accessible user interface (UI) elements, and automatically running scripts that helped automatically perform tedious gameplay tasks. TinyMUD, LPMud, and DikuMUD were popular pieces of backend server software that were customized into hundreds or thousands of different individual games, some of which still run today, usually with web-based main pages that let users discuss the game world outside of the MUD itself.



**Trade Wars** launched on BBS systems in 1984 and quickly sprouted up in many different versions. *Trade Wars* allowed users to compete for resources and form corporations with one another in epic galactic battles. Used with permission of John Pritchett, EIS.

Early social networks like America Online (AOL) are responsible for taking the BBS concept mainstream, primarily by offering thousands of simultaneous dial-up lines and networks of computers capable of passing messages and other real-time chat functions. This new category of social network also offered social games. One of the most popular of these was a basic solitaire game imbedded in a chat room channel. Though not technically a social game (the name gives it away!), AOL Solitaire claimed millions and millions of hours of play. People were content to “play cards” by themselves, in a way that offered no social interaction, because the social network itself—the ability to “hang out” online and chat with friends or strangers—was such a powerful draw that people were willing to indulge in games that took almost no advantage of the social nature of the network just to be together. This anecdote leads us to what seems to be a basic truism of social game design: *people like to play together even if they aren't really interacting with other players*. Often, it's not what you're doing together; it's the concept of being part of a community that excites people. AOL, CompuServe, and similar services first popularized the sorts of interactions we now see reaching true mainstream fruition in social networks like Facebook. And many of the game design principles that were first proven out there are still important today.

## 2.3 MMOs

These types of games led the way for the modern MMO (Massively Multiplayer Online) juggernauts like *World of Warcraft (WoW)* or *ZT Online*, which have attained such a huge number of users and such a powerful gravitational pull that they are, in effect, their own social networks. These MMOs, the majority of which are largely RPG (role-playing game) third-person games that explore traditional sword and sorcery themes, are played almost exclusively on the PC. They require an Internet connection at all times, and the game simulation code runs on a collection of game world servers hosted by the development or publishing company that created the game. Some of these games have been extremely successful, though a dozen or more have also floundered on rocky shores that are hard to navigate. Modern MMOs tend to be extremely expensive to build; they can easily cost upwards of \$80 million just to build a product that can even begin to compete against the best-of-class games in this sector. (And those that are trying to truly take market share from *WoW* can end up costing several times more than that to create and market.) Many social features tend to be built into games like this. For example, users can typically message one another using in-game client mail, can chat in real time, can form clans and guilds and other types of social organizations, and so on.

These types of games achieved great success by effectively creating a large number of features that make them end up acting a bit like social networks themselves. This proposition is a tempting one for many developers, as it allows the developer or publisher a great deal of control over the users and the revenue from the product.

Although it is possible to create a social infrastructure inside your game itself that serves the same function as being tied into a traditional social network, it is challenging. First, you need to have a number of users sufficient to create a “network” in the first place. It takes more than a few hundred thousand players to create an ecosystem. This networking is possible if you have a marketing budget sufficient to raise awareness about your game. Otherwise, you run the risk of throwing a party that no one attends; an empty MMO dies a sad, speedy death, as many have learned over the last decade.

Second, your ability to attract those who aren't initially interested in your product is limited. Like waiters on a slow day, standing outside a restaurant holding menus, true social networks can lure in the uninitiated with various types of infectious ways of spreading the message. But enticing a novice gamer to try a stand-alone MMO like *World of Warcraft* takes a significant amount of energy; without the surrounding social network, these are no passersby for the waiters to appeal to, and MMO publishers are forced to spend heavily to raise awareness through traditional advertising. And even once users hear of the game, before they can try it out they are asked to invest a significant amount of time and attention to learning about and procuring the software itself. There is a barrier to entry that keeps these sorts of games from being accessible to a true mass market.

Third, creating the features necessary to a social network is hard work, requiring hundreds of man-years of engineering and user interface design; this probably isn't the core competency of most game development teams, and those are resources that could potentially be better used making the core game better. Do you really need to invent your own chat systems, mail systems, and so on?

Finally, when a user decides to quit *World of Warcraft*, or any other game with a self-contained social system not part of a larger social network, they are simply gone from the system. With games that exist inside a true external social network, the user returns to the host system even though they've tired of the particular game; it's much easier to lure them back into the original game or into another of your similarly situated products. When I quit a Facebook game, I still come back to Facebook, because that's where my friends are. What they play next, I'll probably play next, and that shared space helps retention and reacquisition numbers greatly.

However, spending five minutes in the “General Channel” of any MMO like *World of Warcraft* or on the online forums of any major retail game should make it clear that a social ecosystem can exist outside the context of the game itself...if the game is big enough. Like tailgaters outside a big football game, people show up just to participate in the social forum, and the time they spend at the event only tangentially relates to “playing” the game. If your game is popular enough, and you invest enough energy in social feature design, it can become a social network of its own.

## 2.4 Just Being Multiplayer Doesn't Make You Social

Other games of the time, like Dan Bunten's classic *Modem Wars*, offered far more engaging interactions between users—direct synchronous gameplay between two humans—in what would end up being a precursor to modern RTS (real-time strategy) games like *Command and Conquer* or *StarCraft*. However, for our purposes here, *Modem Wars* was not a truly social game. Certainly, it was far more interactive than solitaire, but the connection to another human was brief, and what little connection there was neither offered nor relied upon a social “network.” (You had to know each other's phone numbers and direct dial in, let your modems “handshake,” then play the game—while praying that line noise or your mom picking up a phone in another room didn't kill the connection and thus the game.) There was no concept of a larger, socially networked structure driving players to try out the game. (You had to learn about the game from an existing friend, read about it in a magazine, or learn about it from a user group, then go buy a copy at a retailer like Babbage's.) There was also no element of stickiness; each game was self-contained and was over when you lost the connection or one player won. There were no leaderboards, no achievements, or anything else to keep a player coming back the next hour or the next day (except whatever fun there was in playing the game itself). This example illustrates an important point: just being a head-to-head or multiplayer game doesn't make something a “social”

game, and they miss out on many of the advantages of user attraction and retention. Some modern *Modem Wars* descendants like *StarCraft* have addressed this shortcoming by creating their own homegrown social networks (like Blizzard's Battle.net) in order to become social games in their own right. Just being multi-player doesn't make a game a social game.

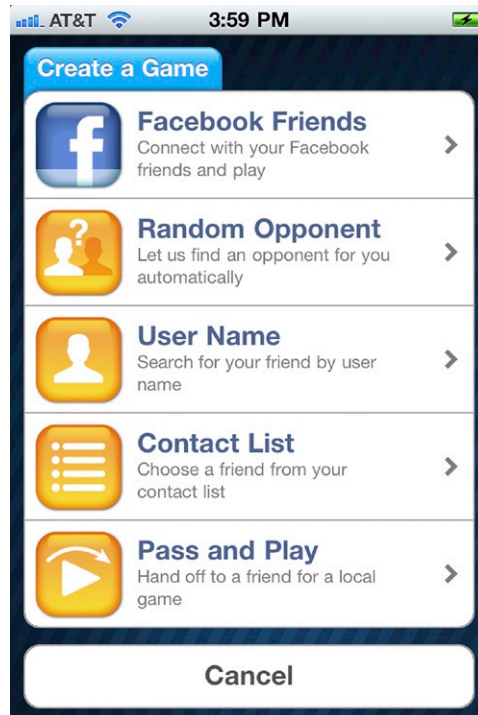
## 2.5 Mobile Games Can Be Social

The rapid rise of smartphones and connected tablet devices has created a new type of hardware platform for social gaming. Although these games cannot be launched from within a social networking website, many of them—such as *Words with Friends* (now owned by Zynga)—do meet our definition. Though at its heart, *Words with Friends* is a straightforward word game for mobile devices, the characteristics it shares with other social games have helped catapult it to success.



***Words with Friends* by Newtoy allows players to compete in a familiar word game over their mobile phones or tablets. *Words with Friends*' attention to social networking features has made it a top seller on iOS.**

First, the game makes it very easy for players to invite their friends to play. By using the platform and social network integration (with Facebook), the game was able to rapidly acquire a large number of users.



***Words with Friends* makes it easy for players to invite their friends. By integrating Facebook and other types of existing connections, games can acquire new users rapidly.**

Second, a few elements of the game design make excellent use of the platform to make the game very socially sticky. The asynchronous nature of the game, the ability to have multiple games going at once, and the constant notifications when a friend is waiting for you to take your turn have made the game very sticky and helped user retention. As anyone who has ever received a text message demanding that they “hurry up and take their turn” can attest, *Words with Friends* is hard to put down.

So mobile games can be social games, too, if they incorporate certain key elements of social networks to propagate and thrive. In order to qualify under our definition:

*A social game is one in which the user's interactions with other players help drive adoption of the game and help retain players, and that uses an external social network of some type to facilitate these goals.*



They need to actively make use of features that allow users to help the game spread itself and remain sticky. So, throughout the coming chapters, we'll stick with this definition, but we'll apply it generously. We'll try to evaluate game features, pricing, content, and other components in the light cast by these three principles:

1. The game must provide a way (and a motivation) for users to help grow the game's user base.
2. The game must be socially sticky, using social interaction to motivate users to regularly return to the game platform, if not to the game itself.
3. The game must interact with (or create) some sort of social ecosystem or framework so that users can be entertained beyond simply the core mechanics of "playing the game."

## *Interview with Newtoy, Words with Friends Creators*

### *Paul Bettner and David Bettner of Newtoy on Mobile and Social Games*



**Paul Bettner** began making games with Ensemble Studios in 1997 as a game developer. He spent 11 years with Ensemble and Microsoft Game Studios building the *Age of Empires* and *Halo Wars* series, and has shipped over 22 million units during the course of his career. In 2008,

he and his brother David started Newtoy, creators of the incredibly successful *Words with Friends* game. He is now a Vice President and General Manager at Zynga.

*Continued*

## *Interview with Newtoy, Words with Friends Creators—cont'd*

**David Bettner** earned a BS in Computer Science from the University of Central Florida before joining Ensemble Studios as a game developer in 2003. He founded Newtoy in 2008, created *Words with Friends*, and is currently a Studio Director for Zynga in Dallas, Texas.

*Q: After your work at Ensemble, you guys got in on the ground floor of the mobile game phenomenon with Chess with Friends. What made you want to focus on mobile multiplayer games instead of retail products?*

*PB:* I've always been drawn to multiplayer game development. Interacting with another person (or people) in a game raises the experience to another level, and I've always been fascinated by those dynamics. Also, we knew we wanted to create products that leveraged mobile products that could exist *only* on a mobile device. That led to exploring the unique capabilities of the platform, and what stood out to us was the always-on, always-connected, always-with-you nature of these devices. They are communications platforms, first and foremost. So we wanted to create a new type of game franchise that was built around this always-connected experience. At the time, we called it “text messaging meets gaming.”

*Q: With Words with Friends, you took a traditional game concept and made it socially sticky. What can you tell us about the power of connected devices that allows players to play old games in new ways?*

*DB:* The smartphone revolution sparked by the release of the iPhone has changed everything about the way we think about games. Looking at the iPhone, we thought there was an amazing opportunity to create a game that takes advantage of the always-on, always-connected, and always-with-you nature of the device. There really wasn't anything like that before. Additionally, we wanted to have a personal connection with our friends through games. Coming from a multiplayer background at Ensemble Studios, single-player games weren't very exciting to me. They felt less alive, less fun. *Chess with Friends* and *Words with Friends* were our attempt to create a game that tapped into those unique capabilities. Also, as simple as it sounds, we just imagined it would be really fun to play!

*Q: In the wake of the incredible success of Words with Friends, what lessons did you learn? What would you do differently if you were going to do it all over again?*



## *Interview with Newtoy, Words with Friends Creators—cont'd*

*DB:* It's been an incredibly fun, difficult, and rewarding journey, with many lessons learned over the past few years. The biggest lesson that first comes to mind is “keep it simple.”

When we first launched *Chess with Friends*, I thought we were keeping it simple. A chess game with a “your turn” and “their turn” move list. That's it, right? It wasn't simple enough. For one, it was chess. That right there I think is too complicated. If you don't know the rules of chess, you're out of luck. A user isn't going to stumble through a game with a live opponent and learn the rules as they go. We also had this arduous sign-up process we forced everyone to go through before allowing them to play with their friends. At one point we even were asking for their mother's maiden name. Looking back, it's amazing we were caught by surprise when that didn't go over well. In the mobile social space, people are looking for a quick, painless, few minutes of fun, and in order to deliver that you need a keen eye on how to keep things as simple as possible. As game developers, we always naturally gravitate toward more complex designs. Always putting yourself in your users' shoes—knowing your audience—is key and something I've learned to always remind myself of.

*Q: Where do you see the convergence of social network games and mobile games in the next few years?*

*PB:* Mobile is the convergence. In a few years, we won't look at social and mobile as two separate things; we will all expect our game experiences to follow us wherever we go. That's the future we're building toward.

*Q: What advice do you have for mobile game developers who want to tap into the power of social connections with their games?*

*PB:* Don't add social as an afterthought! The most successful mobile social titles are built with social play at the core of the game loop, not something that's bolted on after the fact. That's not to say that all successful mobile games require a social component, but I believe that the most successful social games on mobile will be the ones that implement fresh, unique, and simple social dynamics that mirror interactions we have with each other in the real world.

*Q: Last year you were acquired by Zynga. What kinds of things did you learn about game design and production by joining forces with them?*

*Continued*

## *Interview with Newtoy, Words with Friends Creators—cont'd*

*PB:* Zynga sometimes gets a bad rap in the traditional games industry, but the reality is that Zynga is more passionate about good game design and creating fun for our players than any game company I've ever worked at. Zynga studies its players and how they play, relentlessly. This drives a deep level of insight into game design through analytics and a metrics-driven approach. The opportunity to learn and apply these skills across the With Friends games has already had a noticeable impact on our “player delight.”

*Q:* *How have your successes changed things at your studio?*

*PB:* Our success has allowed us to grow, hire more of our friends, and build toward the creative powerhouse that we've always hoped our studio would become. Success has also had a very positive impact on morale. There's nothing like wearing our *Words with Friends* T-shirts and being stopped in a mall or an airport by someone who wants to tell us how much they love the game. That fuels the fire for all of us—it's why we do what we do!

*Q:* *As mobile phones and tablets advance, what sort of new game design challenges and opportunities do you see?*

*DB:* Looking to the future of mobile game development, I see increasing game complexity as a challenge. We're able to make hit games right now with relatively small teams, compared to the console world I came from. As handheld phones become more and more powerful, I hope we can stay true to the mentality we have now where a fun, well-designed user experience is at the core of the game. With more power comes the potential for more complexity, bigger teams, bigger budgets, longer dev cycles. As an industry, I'm optimistic we've learned our lessons and we'll be able to strike the right balance between eye candy and innovative design.

As to what opportunities will present themselves? I think we're still only beginning to scratch the surface of utilizing the current feature set of our phones. Who would have thought I would one day use the same device to play games with my friends, track my jogging route, and make a phone call? Smartphones are integrating themselves into every part of our life and what defines a “game” is becoming more loosely defined all the time. So, I guess that's a long-winded way of saying I think the opportunities are almost endless, and I can't wait to explore them.

## Interview with Newtoy, Words with Friends Creators—cont'd

*Q: Tell us a little more about the goal of Indie Fridays, and how they make the Newtoy culture unique?*

*DB:* Indie Fridays started as a result of the Google 20% idea. I'm actually not entirely sure what the Google policy is, but the way we phrased it was, "Do whatever you want, so long as it contributes something back to the studio in the end." That could be anything from learning a new programming language to working on a new game prototype you've had bouncing around your head for a while. It sounded cool, so we decided to give it a try and change it if it didn't work out. It was pretty tough the first few weeks. I remember Paul sending me an email one Friday saying, "This doesn't feel right, I think 20% is too much." I suggested we wait a couple of weeks and reevaluate, and I'm glad we did.

Indie Fridays have become a place where many of our new game ideas are generated and allowed to incubate. Both *Hanging with Friends* and our next still unannounced title both were born out of Indie Fridays. Developing new game ideas is an extremely difficult and highly creative process. Often what you need is time for an idea to bake in between iterations. Fridays allow us to take an idea and get it up and running in a rough prototype very quickly, often just a pen-and-paper prototype at first. During the rest of the week, the game sits in the back of your mind, or if it's far enough along, it's already in prototype on our phones and we're playing each other all week. By the time next Friday rolls around, we have a solid idea of what's working and what's not, and a list of new ideas we'd like to try.

It continues to be a difficult practice to embrace. Folks here often want to work on their mainline projects all week. It can be hard to switch from the game you're working on Monday through Thursday, but we continue to encourage it. It wasn't obvious at first, but now that we've seen the output, it's become apparent how valuable and important it is to our studio and its success.

*Q: Any other advice you'd like to share with game designers who are moving from the world of AAA retail game development into the mobile/social space?*

*PB:* There's nothing quite like the thrill of working on a game that *everyone* plays, from your wife to your mother-in-law and your kids. Fast development cycles; small, tight teams; cutting-edge game design challenges—it's the most fun any of us have had making games.

In other words: come on in, the water's warm!

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# CHAPTER THREE

## History of Game Monetization

### 3.1 What Do We Mean by Monetization?

Throughout this book, we'll be talking about ways to monetize users. What do we mean? We're talking about the ways you can get users to pay you. It's that simple.

The ways you can go about trying to accomplish this goal are numerous, and the strategies that you can use can become quite involved. But at its heart, we're looking at games as a business that is designed to provide entertainment to customers in exchange for revenue. Throughout this chapter, we'll look at the ways games have traditionally been monetized and how the industry has evolved to its current point.

Along the way, keep an eye out for the major types of monetization:

- Retail purchases
- In-game microtransactions
- Digital downloads
- Subscription models

### 3.2 A Brief History of Game Monetization

Originally, games were free. They were simple programs like *Spacewar!* (though writing them was anything but simple at that time) that were passed around mainframe labs and later around college computer science departments. Within a few years, these games were being sold on floppy disks packaged in sandwich baggies at small specialty software stores, then on cartridges in retail outlets. Most of these games were first at specialty computer stores that sold hardware and software, and then, a few years later, in more mainstream retail outlets like Sears and Babbage's. The transaction was straightforward; you paid your

money and you took your chances. This model continues to hold strong in traditional retail game markets today.

When MMOs appeared in something approaching their modern form, they needed to offset server and maintenance costs, so they started charging subscription fees. Early games such as *Island of Kesmai* for CompuServe charged as much as \$12 per hour to play. *Neverwinter Nights* for America Online reduced this price to \$6 an hour, an amount still prohibitively expensive by today's standards. Joe Ybarra's *Shadow of Yserbius* followed, along with Kesmai's *Air Warrior* and a handful of other titles with similar hourly or monthly service fees. Bandwidth and server time were relatively expensive then compared to what they cost now, and the number of total users was fairly small, so companies were forced to charge higher prices because they lacked a significant volume of customers.

As home PCs grew more powerful, and more people became connected to the Internet, new games appeared that took advantage of better graphics and online connectivity, and refined the pay-for-play business model. The first of the modern wave of MMOs were games like *Meridian 59* and *Ultima Online*. These games cemented the practice of charging a monthly fee for unlimited play time, a pricing model that provided a more regular income stream and greater predictability for game operators. These—and other games like them— attracted hundreds of thousands of new users to the space. *Asheron's Call*, *EverQuest*, *Dark Age of Camelot*, and eventually Blizzard's *World of Warcraft* followed. They expanded the user base by an order of magnitude and cemented the basic MMO pricing model, which involved a boxed purchase through retail, followed by a monthly subscription fee for unlimited access. This model dominated most paid online gaming in North America and Europe until almost 2009.

Users were enchanted by the interactivity with other players and by the ability to explore large virtual worlds and to assume roles as craftsmen and merchants, as well as the more traditional fighters and wizards. Stories of online relationships and marriages flourished. Sony Online Entertainment, Electronic Arts, and other publishers became hooked on the high yield of games that could monetize users every month and rushed to build more of them. Attracted by the promise of riches and the exciting design challenges associated with creating pervasive worlds for millions of users, development studios flocked into the space, creating something of a gold rush. Unfortunately for every success like *World of Warcraft* or *EVE Online*, there were a spate of failures, from *Anarchy Online* to NCSOFT's doomed *Tabula Rasa*. Development costs continued to rise, and the quality bar set by the successes made it very difficult to pull users away from whichever of these games they were already playing. These products made fortunes—and some continue to do so—but the space also generated a number of spectacularly expensive failures, which made investors and developers gun-shy. This is a great type of game for us to understand, because first of all, these games usually feature very advanced social features but are not typically social networks unto themselves. Second, many of these games were early leaders in user-behavior metrics gathering and analysis, and

their techniques are widely emulated within many social games. Finally, many of the less successful MMOs were forced to adopt alternate mechanisms for monetization, some of which borrowed from their successful brethren overseas.

In South Korea and China, the rules were different. First, very few people owned home PCs or consoles. Instead, millions rented time at Internet cafés—a highly social setting that set the tone for the way games in general and online games in particular—would be played. Rampant piracy of PC games in these territories meant that traditional retail models simply didn't work; for each game sold, tens of thousands copies were pirated. Developers were forced to extract money from their users in other ways. Subscription fees worked to offset this problem, and MMO games influenced by the West, such as *Lineage*, attracted huge numbers of users in South Korea and Taiwan.

Many eastern companies adopted western game design ideas—particularly the highly popular MMOs—but by necessity, found ways to distribute the client software for free, selling the users peripheral equipment and gear instead. This focus on selling virtual items for avatar-based games (perfect for the MMORPG genre) generated significant revenues by extracting small amounts at regular intervals (often every day, for avid players) from a very large number of users. Before long, the modern microtransaction model was born. There have been a nearly infinite number of minor refinements to this practice, from offering non-gear types of services (transferring or renaming characters for a small fee, and the like) to offering users ways to save time in the game by obviating the need for tedious tasks, and so on. For the most part, this microtransaction model carried forward directly into the realm of social games. The Internet cafés of Asia formed the petri dish in which the freemium microtransaction model was born.

This is the world that Facebook stepped into, initially with no games and no real plan for monetization of its users. Fairly early on, they allowed third-party developers to create games and apps for the rapidly expanding platform. By 2007, Zynga was making significant revenue from its players by offering free games in which play could be upgraded through microtransactions. Such microtransactions operated in an abstract form within the metaworld of the game, initially as opportunities offered to players to purchase of a type of in-game currency that could be used to speed up the completion of tedious in-game tasks or let users keep playing when their daily or hourly allotment of turns had been expended. Though it took this model several years to become profitable, with a number of refinements, Zynga, Digital Chocolate, and a few other social game companies have managed to reap huge rewards and attract a number of daily users that dwarfs the numbers seen on almost all console or MMO games. These successes have led to a second, more recent gold rush, this time into the social free-to-play game space.

Facebook itself entered into the microtransaction game in 2009 with the alpha release of Facebook Credits, a system that sought to provide a common currency for all games played on Facebook. (And in so doing, to guarantee that Facebook would take a piece of Zynga's ever-expanding pie.) Facebook Credits became the official currency of all games on Facebook as of July 1, 2011, and it

is currently used in hundreds of different games. Facebook offers game developers various incentives to make use of their currency system, some liability protection, and a number of tools to facilitate integration into the game economy. For these privileges, Facebook takes 30 percent of the transaction. This fee is transparent to the users, such that if a player spends nine Facebook Credits in your game, which they bought for \$9, you get \$6. Although many social game developers decried Facebook's greed in taking such a significant cut of each microtransaction, the introduction of a universal currency on the platform is good for both users and developers on balance.

Gamers are provided a consistent, secure, trustworthy marketplace for purchasing credits. They can work to resolve any disputes with a major brand, rather than with individual vendors. The credits can be purchased and given as gifts to friends and relatives, even if the purchaser isn't certain what game the recipient likes. Because they can be used at point-of-purchase in any Facebook game, the credits themselves also have more value than tokens that have currency in only one game or one family of games.

Developers ended up getting easy-to-implement APIs (Application Programming Interfaces), which save them a great deal of work in creating their own systems for getting money from users. Developers and publishers are freed from the expensive dispute resolution and customer service headaches that go along with the transactions themselves and can benefit from a unified currency that has far more legitimacy than did the previous host of different currency types. Best of all, by selling Facebook Credits, Facebook has made clear the rules of customer engagement on their platform, and developers no longer have to fear that their game could simply be taken offline by the platform for an unwitting violation or due to a change in platform policy.

Other social networks have followed Facebook's lead. For example, the online gaming website hi5 offers a similar currency, which they call hi5 Coins. They augmented this system with a comprehensive suite of tools called SocioPay, which uses player metrics to tailor microtransaction offers to particular players, in an effort to increase their average revenue per user (ARPU). For example, a customer who seldom buys anything is more likely to be served up general advertisements, and a user who regularly buys items in a certain price range is more likely to be offered items targeted around that particular price point. By offering a unified currency model and taking a piece of the action, social networks become more likely to invest in creating tools like SocioPay that in turn help developers make more profitable games.

The history of game monetization is far from complete. As of this writing, a player can get great games ranging in price from completely free, to upwards of \$70, and there is no limit to the amount of money that can be spent on "upgrades," both in-game and as hardware, add-ons, accessories, and the like. The market has fragmented such that there is currently no standard monetization paradigm, and it's anyone's guess if a single standard will emerge (though with such a vast array of products available, and such a broadly expanding and



diversifying group of “gamers,” this seems unlikely). By understanding the history we’ve just discussed and the types of different models that have worked (or failed) in the past, we’ll be better armed to react quickly to future changes in the marketplace, like the emergence of new platforms, and the continued increase in players.

The way games were monetized changed as the gamer population of the Earth increased from a few hundred thousand in the mid-1980s into the millions by the 1990s and into the hundreds of millions by the first decade of the 21st century. We’ve observed a general trend of games getting cheaper as they reach larger economies of scale. What types of business models might begin to emerge or become feasible in a world of two billion gamers? Such a world isn’t here yet, but given population and connectivity trends, one can imagine that it might not be so far off.

The rest of this book will give you a view of the types of game, feature, and UI design that can be broadly applied to many of the different hybrid game models out there as well as to those new models that have not yet come to light. Going forward, we’ll look at some of the reasons to create a social game, why they have become so popular, and how they are changing the marketplace.

## Interview with Richard Garriott: The Three Grand Eras of Gaming



**Richard Garriott**, a.k.a. Lord British, is one of the best-known figures in the history of computer gaming. He published his first game, *Akalabeth*, in 1980, then went on to create the beloved *Ultima* series. He cofounded Origin Systems in 1983 and published the first major MMO, *Ultima Online*, in 1997 as part of Electronic Arts. His second company, Destination Games, was sold to

Korean MMO developer NCSOFT in 2001. He holds a Lifetime achievement award from the Game Developer Hall of Fame. Richard has travelled to the International Space Station, owns a small part of the moon, and has visited the wreck of the *Titanic*. He currently runs Portalarium, a social game development company in Austin, Texas.

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