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## MICROSOFT ACQUIRES MASSIVE, INC.

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#### INTRODUCTION

In May 2007, Microsoft Corporation was a company in transition. Despite decades of dominance in its core markets of operating systems and desktop productivity software, Microsoft was under tremendous pressure to create strongholds in new market spaces. One of these spaces was home entertainment, particularly the gaming sector. With its inaugural video game console, the Xbox, and its successor, the Xbox 360, Microsoft had built a strong position in the industry, competing with Sony and Nintendo for dominance in the next-generation console market.

The other key area of growth for Microsoft was digital advertising. Its most recent foray into this space came in the form of its largest acquisition ever, the \$6B purchase of Internet marketing firm aQuantive, Inc., announced May 18, 2007. This deal came only weeks after Microsoft failed to acquire DoubleClick, which instead agreed to be bought by Google Inc., Microsoft's chief rival in the online advertising space. [TJ2] Microsoft also failed to purchase online advertising mediums such as MySpace and YouTube.

At the intersection of these two growth areas was Microsoft's May 2006 acquisition of Massive, Inc., a leader in in-game advertising. A year after this deal was first announced, many questions still remained:

- 1. How did Massive fit into Microsoft's overall strategy, and how would more recent developments in Microsoft's gaming and online advertising businesses affect its role?
- 2. What were the market forces that drove the Massive acquisition, and had they changed significantly in the intervening year?
- 3. How was the in-game advertising market evolving, and where was it likely to be in the next five years?
- 4. What challenges remained in the integration of Massive, and how could they be addressed?

#### INDUSTRY OVERVIEW

## The Advertising Opportunity Within Video Games

Market data indicates that video games could become as profitable a platform for advertising as television. This is particularly true of the key demographic, 18 to 34-year-old males, targeted by many product companies. Nielsen Interactive found that young men spent an average of 12.5 hours each week playing video games, and only 9.8 watching television [IK2]. Thus it is becoming increasingly difficult for advertisers to approach the key demographic group of gamers (18 - 34 year old) through traditional media channels. In-game advertising addresses this lucrative market by displaying relevant advertisements in what is increasingly popular medium of advertising. Meanwhile, income from these advertisements also contributes to video game publishers' bottom lines, helping to offset the enormous development costs in the intensely competitive video game industry. Although this market is still in its nascent stages, companies such as Neo Edge Networks, Double Fusion, and Massive Inc. have begun to tap into its potential, with Massive forecasting the total market for in-game advertising at \$1.8B by 2010 [IK1].

Since its very inception, advertising in video games has been relatively primitive. A car manufacturer, for instance, would pay to have an ad for its vehicles hard-coded onto a base-ball game's stadium billboard. Using this method, promotions never changed once a publisher included them on a game disc and shipped it to market. As a result, ads quickly grew stale by the time they reached the end user who would see the same billboard repeatedly day after day of continuous gameplay. Furthermore, since ads had to be inserted during the development process, many ads were no longer relevant by the time the game was released.

However, in-game advertising methods are increasingly ripe for redefinition as the fast-growing gaming industry comes to rely more heavily on the Internet. In 2004, Massive Inc. introduced the concept of inserting ads into video games played through the Internet. These ads could be contextual and controlled and altered as desired by the advertisers. This new method of advertising created a compelling universe of possibilities in the expanding market for timely, relevant advertising in video games. The advertising possibilities range from movie premiere advertising by Hollywood studios to holiday sales advertising by retailers.

Additionally, advertising dollars provide a new revenue stream to potentially reduce the reliance of game developers on publishers for distribution. In 2005, video game developer Spark Unlimited signed a long-term strategic partnership with Massive Inc. which covered several undisclosed, high-profile titles. The deal was unique because no publisher was involved, leading to speculation over whether Spark intended to publish its own PC titles using advertis-

ing revenue for financing development. Spark responded by issuing the following statement: "We know the gamer we're targeting that we want to provide content for. Working collaboratively with Massive, we can better tailor the experience to bring in associated products, services, and like-minded partners in a way that can help the revenue model, help the business plan, and add value to the core audience."

The growth and importance of the in-game advertising industry has caught the attention of several Fortune 500 companies. Immediately preceding Microsoft's Massive acquisition, Viacom Inc. purchased a gaming social networking company XFire Inc. for \$102 million. In September 2005, News Corp. announced a \$650 million purchase of an online gaming company IGN Entertainment Inc. Meanwhile, in a bid to establish an advertising presence within the gaming market, Google announced the acquisition of Adscape, a privately held advertising company that specialized in integrated in-game advertising. Adscape is expected to become a key competitor to Massive and other industry players in the coming years.[T5]

## Market Size and Demographics

#### **Video Game Industry Growth**

Analysts project explosive growth for the already thriving global video game market. In 2005, over 228 million video games were sold in the U.S., translating to \$7B in sales [J1]; this equates to roughly two games for every household in America. However, it seems reasonable to note that some households have significantly more video games than other households. Meanwhile, the introduction of new wireless devices capable of downloading games is expected to drive the worldwide video game market to \$46B by 2010 from \$27B in 2005. This represents a compounded annual growth rate, or CAGR, of 11.4%.[1]

The strongest growth is anticipated for regions outside the United States. While the U.S. video game market is expected to grow at a CAGR of 8.9%, reaching \$13B in 2010, the Asia-Pacific market is predicted to grow at an even faster rate of 12.3%, reaching \$17.4B in 2010. In fact, the fastest-growing region was projected to be the Europe, Middle East, and Africa (EMEA) market, growing 13% annually through 2010 to reach a \$13.9B market size. Analysts believe that even the relatively small Latin American market will grow from \$531M to \$835M by 2010, an impressive 9.5% annual gain. [PF1]

The rapid growth of global video game sales is certain to increase competition between companies and drive down profits. Major players, including Microsoft, Nintendo, Sony, and

Electronic Arts, face difficulties in finding qualified, creative employees to develop innovative games that will satisfy customer expectations and gain market share in this exploding market.

#### User Demographics in the Video Game Industry

Surveys conducted by the Entertainment Software Association and the Nielsen Interactive Study reveal key market demographics. They found the average male gamer to be 29 years old, with 9.5 years of gaming experience. Three-quarters of households with a male aged 8 to 34 owned a video game system. Moreover, men spent twelve hours per week on average, roughly one-fifth of their overall leisure time, playing video games, while they spent only five hours listening to music, four hours on the Internet, and six hours watching DVDs or videos. Furthermore, this group rated video games as highly enjoyable, giving the medium an 8.6 to 8.7 on a 10-point enjoyment scale, compared with 7.8 for watching TV and 8.3 for surfing online.

Overall, the average age of video game player is 33, with 62% being males and 38% females[J1]. Adult gamers have been playing video games for an average of 12 years, with this number expected to increase as the current gaming generation ages.

Massive Inc. CEO Mitchell Davis explains: "About 70-plus percent of 18-to-34 year-old men are playing games as their prime entertainment source. They're doing it in prime time, between 6 and 11pm, and they're doing it instead of watching television. They're playing about 20 hours a week, which is more than they watch television — a lot more. So that was 30 billion hours of game-playing last year, probably about 35 billion or so this year."

Although firmly entrenched in the core group of players described by Davis, video games also appeared to be spreading beyond their traditional demographic. 41% of gamers surveyed reported a household income of over \$50,000, signifying purchasing power beyond video games.[5] Additionally, 34% of head of households played games on a wireless device, such as a cell phone or PDA, up from 20% in 2002. Gamers were also more diverse than previously thought; in fact, 44% of gamers are female. Moreover, women over the age of eighteen represented a greater portion of the game-playing population (26 percent) than boys from ages 6 to 17 (21 percent). These demographics are expected to become even more representative of the mainstream gaming community as games become more pervasive and inclusive.

#### **Advertising Market Size**

In-game advertising is clearly poised to grow in the coming years, but there is vigorous debate over how rapid that growth will be. The 5-year CAGR has been pegged anywhere from 23% to 66% by various analysts. Early in May, Davis made a statement claiming that "there has been a broad acceptance of in-game advertising as a new medium." He predicted the market size to be somewhere between \$1.6B and \$1.8B by 2010. The managing director of The Wall Street Transcript showed even more enthusiasm in January by projecting the market to reach \$4B by the end of 2008 [X4], while the Yankee Group conservatively forecast \$730M by 2010 (Exhibit 12). [DL 4] A more recent study by eMarketer showed that in-game advertising spending in the U.S. will be \$625 million in 2011 (Exhibit 2, Figure 1).

Vedrashko's study noted that in-game advertising is currently largely limited to PC gaming. Jupiter Research shows that while approximately a half of American households own a console, the consoles are connected to the Internet in only 6 percent of homes and 'only 13 percent of the overall video game audience have positive interest level' in one." [V1]

## Video Games and Advertising

#### The Role of Advertising in Video Games

Advertising in video games dates back to 1978, when developer Scott Adams first put an onscreen promotion into his "Adventureland" game for his then-forthcoming game, "Pirate Adventure." However, although in-game ads have existed for nearly 20 years, two problems kept the market from growing very large. First, prior to 2005, game ads were "static," meaning they were built into a game and could not be changed or updated. Game makers were thus missing out on at least 50 percent of the ad revenue that could come from timesensitive promotions for products such as newly released movies. The second problem was metrics — how would advertisers know if a gamer ever proceeded to level 10 and actually saw the ad they had paid for? [SL2]

By 2007, both problems had been solved. The proliferation of broadband Internet and the integration of online experiences into traditional gaming allowed for more frequent updates to game software, which would allow for time-sensitive ads. Dynamic advertising could thus present gamers with up-to-date advertisements every time they played. In an illustration of the importance of this trend, Electronic Arts signed a deal with Massive Inc. on October 31, 2006, allowing full-motion ads to be streamed via the Internet to Xbox 360 and PC versions of four EA titles, including their Need for Speed games. This new type of in-game advertising was particularly attractive to the music industry; players could view an ad for a new al-

bum and listen to it while playing the game, or even find information about upcoming music events and concerts.[T1]

Taking advantage of the internet's bidirectionality, the user's response to the updated ads can be reported back to the server, which solves the second problem of feedback. This allowed advertisers to find detailed information such as 'which player in the game saw the advert, and when, for how long, and from how far away'.[YY1] The aggregated feedback can be reflected to improve future ad deliveries, which makes in-game advertisement more dynamic compared to other traditional ad media. Thus, with the help of growing technology, in-game advertising had introduced a new revenue stream to the traditional gaming market; by offsetting growing development costs, advertising would allow studios to take more risks in game development. Furthermore, advertising could potentially help reduce games' retail price, thus increasing demand and improving penetration of video games in large developing markets like China and India.

Many different types of in-game advertising were developed, ranging from billboards to television and computer screens to physical objects, such as: vehicles, pizza boxes, and soda cans. Also, video games based on a blockbuster movie title could result in an advertisement for the movie and vice versa. Full-motion videos and 3D object advertising were also increasingly supported, allowing for user interaction during the game. Integrating products into the game itself represented another form of advertising that is commonly used in television and movies. More straightforward ads could be displayed during transitions or in introductory splash screens.

In-game ads even offered the possibility of an entirely new sales channel. Interactive commands allowed users to easily buy advertised products, bridging the gap between the real and virtual gaming world. For instance, by typing the command "/pizza" in Everquest II, a massively multiplayer online fantasy game with 330,000 active users, a player could access the Pizza Hut website and place a order for delivery. Sony planned to further integrate this function into the game, allowing players to charge pizza to their monthly game subscription bill. "The goal for the future is to eventually let people do more things like this," Chris Kramer , spokesman for Sony Online Entertainment, said. "They could type '/harry potter' and get the new Harry Potter book delivered or '/star wars' and get the new Star Wars DVD." [4]

Additionally, in-game advertising enhances game realism, making the game more fun and absorbing the user further into game play. In the FIFA International Soccer series, for example, a lack of billboard ads would seem artificial. "One of the things that we found is that consumers actually say they prefer to have real ads in the games, because it gives them a better sense of realism of gameplay," commented Kevin Johnson, Microsoft's co-president of its

Platforms and Services devision. "So, consumers are happier in these cases. Here's Tokyo Race Driver 3. This is obviously a great place to advertise car insurance [like] Progressive. What you get a sense for is the ability to drive better consumer excitement, because they get more realism. You can drive rich, immersive advertising." [Y2] In-game ads also established the immediacy of the environment. Chip Lange, EA's vice president of online commerce, noted: "Some areas naturally support the advertising. If you drive around an urban environment and there's no advertising, the space feels naked — and if the advertising is dated, the game feels old." [SL1]

Clearly, advertising in games was fundamentally different from the more traditional advertising on television. However, product placement advertising in television and movies is the same as it is in video games. BusinessWeek wrote: "players see themselves in the games, something that's difficult with TV shows. And far from rebelling against ads in their players, gamers seem to be telling advertisers they want to see more of the brands that help define who they are." [S1] Advertising that was non-invasive to gameplay and contextually relevant to the environment could thus create a positive connection between brands and consumers.

However, this new medium of in-game advertising has its associated risks. Contextual ads placed without any scrutiny can be very harmful to the gaming publishers, disrupting actual game play and leading to lower potential sales. To counter this, game publishers have to set rigorous standards to ads before they can be dynamically included in a game. These standards would only allow those ads that add realism and entertainment value to the overall gaming experience, not those that might detract from game play.

#### **Effectiveness of Advertising in Video Games**

In 2004, Activision Inc. and Nielsen Entertainment released the results of a study on the effectiveness of in-game advertising at various levels of product integration. The study was conducted among 1350 active male gamers aged 13 to 44. Each participant was exposed to brands and products at varying levels of integration within various games, including some games without any advertisements.

Given the increasingly critical lens through which advertisers and media planners view advertising effectiveness — and the lack of reliable data regarding product integration — Nielsen Entertainment and Activision went to great lengths to ensure the validity of their methodology. To that end, they tested in-game and other advertising through highly controlled experiments where they could maximize the reliability of the findings.

According to these companies, the research results showed that a majority of study participants said that when the product was relevant to the game, advertising enhanced the experience. Independent research compiled by Nielsen Interactive Entertainment has shown that gamers recall advertisements in games up to 35% of the time. The vast majority of gamers who recalled a product in a game felt that it fit naturally in the game they were playing. In fact, 69% of participants recalled seeing a particular Cingular advertisement placed in Need for Speed: Underground 2, according to the survey. However, ad recall presumably depended on how well the ads were integrated into the specific games being played, something Activision and Nielsen recognized. Noticing that positive movement of marketing metrics did not always correspond to increased integration, the companies proposed new metrics, focusing on categories such as 'Unique Object and Game Elements' and 'Brand Presence'.

"All media can claim to drive some level of awareness, but until now, no other media type has been able to reliably prove its ability to change consumer opinion," said Robert A. Kotick, Chairman and Chief Executive Officer of Activision. "As this study shows, video games are a powerful ad delivery medium. But the challenge for the industry has been to develop a pervasive unit of measurement that will enable advertisers to accurately gauge the effectiveness of in-game ads." [A 4]

Andy Wing, President and CEO Nielsen Entertainment commented that "Measurement drives efficiency in any business exchange; especially in advertising. Therefore, as video game play successfully emerges to define a new paradigm for targeted interaction with consumers, the need to establish accurate measures becomes even more critical; for both advertisers, who have finally found a pipeline into the 18-34 male sweet spot, and the video game publishers sitting in pole position to monetize that audience. With 18-34 year old male audience premiums of 6-7 times the average prime time television CPM, it's easy to see why measurement has become such a huge priority for the industry."

In addition, Michael Dowling, General Manager of Nielsen Interactive Entertainment, a division of Nielsen Entertainment said, "Video games provide a relevant context for gamers to virtually experience products. This unique unit of exposure serves to reinforce and enhance a brand's key selling proposition. Moreover, video games can provide actionable feedback to advertisers. Gamers like to customize their game play experience based on their personal preferences — so, the color of the Jeep a gamer chooses says a lot about how they might act in the real world. This is invaluable information for advertisers." [T6]

#### Consumer Reaction to Advertising in Video Games

There was some debate over whether advertising negatively affected gaming experience or hurt overall product quality. Some "core gamers" saw advertising as greedy and invasive, dubbing in-game advertising software as spyware; for this reason, Electronic Arts received backlash against their Battlefield 2142 title, which contained in-game advertisements from IGA Worldwide. Similarly, substantial criticism was levied against the Valve title Counter-Strike, a first-person shooter, to which in-game ads were added in 2007 (see Exhibit 14). Many gamers complained that this kind of advertisement did not bring any reality to the game and in fact stripped it of its essence. The most fervent Counter-Strike communities reacted with outrage, with some server administrators especially unhappy:

"To get straight to the point, how can Valve justify the use of our own hardware resources, bandwidth and money to cash-in with third party advertisement? Here, a quality dedicated CS server can cost from 30 to 50 EURO (about \$40-70 USD) monthly if rented. Pardon us if we feel like being exploited to be compelled to stream ads for you, with no cheaper hosting options, no revenue sharing plans, nothing. I think that disregarding the dedication and monetary efforts that many players undertake to keep your game one of the most successful online affair ever, it's a great form of disrespect." [P2]

Moreover, some social critics argued that the increased revenue for video game developers would not be passed on to consumers in the form of price reductions. Professor Jeffrey Cole of the University of Southern California asserted: "If we're going to put advertisements in games, then charge me \$30-\$40 for a game, not \$60-\$70 dollars, let me (as a consumer) benefit as well". [P1]

Meanwhile, other gamers felt that advertisements in gaming enhanced the overall gaming experience by adding realism. According to one survey, 54% of gamers in Europe acknowledged that in-game advertising caught their attentions, and 50% believed that in-game advertising made the experience more realistic (see Exhibit 2, Figure 3 and 4). To support this viewpoint, Massive cited an independent Harvard Business School study which showed that "over 90% of core gamers do not mind in-game advertising in their games." [IK3] Anecdotally, it appeared to be the case that consumers' perceptions of brands could be improved through in-game advertising, lending credence to the notion that it could be a positive influence. "I don't think players will look at an ad of Coke and then go out and buy a 12-pack, but they might think Coke sounds [cool]," commented Adam Warner, a 26-year-old graphic artist. "It's good in-game advertising if it impacts you enough to change your perception of a brand."

Others have criticized how in-game advertisement may theaten an immersive gaming atmosphere and the ability for in-game advertisers to stay in character. Vedrashko, in his master's thesis on in-game advertising, noted that "After all, there is nothing 'realistic' about people slaying orcs or blasting intergalactic invaders." [V1] Tabletop role-playing games and multi-user dungeons (MUDs) maintained an immersive gaming environment with rules that would get players kicked out of the game if they mentioned real-life events. Although players may not object to billboards promoting upcoming movies in a virtual Times Square in "True Crime: New York City", a billboard for "Deuce Bigalow: European Gigolo" in extraterrestrial "Planetside" had players complaining of a disrupted environment. [V1]

#### The Advertising Industry's Perspective

Response to in-game advertising from the advertising industry was generally positive. Advertisers were keen to reach the 18-34 male demographic, and in-game advertising was recognized as a new medium through which to do so. Indeed, a study by the Yankee Group in 2003 showed that a 7 percent decline in TV viewing in the target 18-34 male demographic could be directly attributed to computer games. [4] Another study in June 2006 showed that in-game advertisement has broader awareness among young people than elders in US (see Exhibit 2, Figure 2). This enthusiasm, along with the new possibilities offered by dynamic advertisements, prompted growth in the in-game advertising industry, which generated \$56M in revenue in 2005 but could grow to as much as \$1.8B in 2010, according to Massive Inc. By comparison, the total worldwide advertising market in 2005 was \$378B, and is expected to grow to \$505B by 2010 (assuming the current 6 percent annual growth rate).

An in-game advertising network reduces the cost of accessing the gaming audience. Advertisers wishing to address a larger gaming market had previously required technical cooperation with game developers of multiple development houses, but the dynamic online advertising infrastructure allows a faster production of standardized ads while being scalable to a larger audience. [V1]

The standardization of in-game advertising formats that allows players to expect advertising formats and their placements in a virtual world makes the advertising network vulnerable to advertising blindness that web page banners have suffered. In mid-2005, Massive has explored other virtual advertising media, including interactive billboards (a Toyota Yaris billboard that provides more information upon touch), reactive three-dimensional objects, and "billboards whose visibility changes depending on whether the game character is wearing night-vision goggles [V1].

Games that don't necessarily require an internet connection allow players to escape from Massive's advertising audience. [V1]

## Market Dynamics

#### Relationships with Game Publishers and Developers

Building an effective in-game ad network required extensive partnerships with leading game publishers and developers. The underlying relationship between advertising providers like Massive and publishers like Electronic Arts was symbiotic in nature. By signing contracts with providers, publishers gave providers access to large audiences of game players. In turn, if providers served a rich set of ads from high-quality advertisers, they offered attractive revenue sharing to publishers. Meanwhile, publishers and developers generally maintained creative control and approve all advertising delivered to their games.

Initially, some industry analysts voiced concern that blockbuster hits were crucial to getting big-name advertisers, however, major game makers like EA tended to avoid offering advertisers favorable deals. Alex Kakoyiannis, managing partner at Navigame, observed that Massive's partners "[were] not the triple A games that you read about. Coke doesn't care about 50 different football titles; they care about Madden."[X2] These analysts therefore saw a 'chicken-and-egg' problem; only hit game titles could attract advertisers, but makers of these titles were hesitant to offer favorable terms to these advertisers.

On August 31, 2006, EA struck deals with two in-game advertising providers, Massive Inc. and IGA Worldwide Inc., marking EA's major new steps into the lucrative online advertising business. Coca-Cola and Honda were two of the many companies that would be advertised in EA's upcoming games.

#### **Advertisers**

Massive's advertisers are primarily composed of global, blue chip companies in sectors such as entertainment, automotive, telecommunications, packaged goods, technology and retail space. The explosive growth of the video game industry is convincing companies that solely employ traditional advertising methods to also consider in-game advertising.

Much of the success of the market will depend on the growth of the audience. While video games offer many benefits to advertisers such as longer exposure to ads and advertising

tracking, they will not invest large sums of money until the audience reaches at least 20 million. Until then, companies will continue to invest on a trial basis, without diverting significant sums of money away from more traditional advertising.[7]

#### **Business Model**

Before the internet era, advertising in video games had to be coded into the game at the development stage, which limited its application to specific genres of games such as baseball and racing games.

In the new business model, advertisements are placed into the games after they have been shipped, typically incorporating ads onto game space objects like vending machines, bill-boards, and TV screens. The ads are dynamically served; that is, they can be changed in real time so a billboard advertising a fast food restaurant could be changed to advertise a new movie within a week.

The game industry sees in-game advertising as a promising new revenue stream that will boost margins. One of the market leader, Massive, claims that "by aggregating the largest audience of gamers and providing real time delivery of advertising across top-selling video games, [they] can provide publishers and developers \$1–\$2 profit per unit shipped for their titles." Video game publishers currently make a profit of \$10–17 on a \$49 title. Advertising, therefore, presents a possible profit increase of 10–20%. [6] By the end of 2006 Massive had partnered with 38 publishers to run ads in 60 different game titles. Advertisers include New Line Cinema, Coca-Cola, Subway, Honda, and Gillette. [X2] (Exhibit 10)

### **Supporting Technology**

Massive sells the opportunity for companies to insert their brands on billboards, posters, and other on-screen elements within video games. Advertisements are delivered to the gamers online via the Massive ad server. Massive transmits those advertisements over the Internet and inserts them into the environments of games as users are playing. Unlike other advertising companies which hard-code advertising into video games during the development process, this more sophisticated, dynamic method allows advertisers to better target gamers with messages tailored to geography and time of day. The ad campaign is highly customizable and can be changed quickly to meet evolving market conditions and brand priorities. Messages are customized to contextually fit each game environment and then served to locations within the game that are preselected by Massive and the game's creative developers. Massive also works with third-party, independent research providers to survey the effective-

ness of in-game advertising among video game players. Findings are shared with advertising partners and are utilized to further understand and exploit video games as an advertising vehicle.

Massive allows publishers and developers to work in their native media formats. Massive's patent-pending ad serving technology recognizes each ad request by game title and delivers it in the appropriate format. Furthermore, the Massive Network delivers a level of accountability and insight into the effectiveness of video game advertising that is unavailable in traditional media. When an image is presented to a gamer during game play, Massive's ad server records data from the game to determine if specific viewing thresholds are satisfied. Time of display, size, angle, and exposure thresholds must be met in order to count as an ad impression on the gamer. The impression is then recorded into Massive's database, thus collecting previously unavailable game play data for publisher and developer partners. Advertisers receive daily reports of audience data from the Massive Ad Server which provide full insight into campaign delivery and facilitate the ability to readjust campaigns in real time. Massive has a strategic partnership with Nielsen Interactive Entertainment, who provides third-party measurement and accountability for advertising on the Massive Network.

Threatening the advertiser network is the demonstrated ability to remove unwanted ingame advertisements: Vedrashko noted that "recently, two tech savvy student hackers have demonstrated how easy it is to prevent servers from feeding dynamic ads into their games by modifying a few lines of code." [VI]

#### The Competition: Electronic Advertising Networks

Key Players (Exhibit 5)

- Massive, Inc.
- IGA Worldwide Inc.: IGA was founded in 2002 by Darren Herman and is now run by CEO Justin Townsend. It raised \$12 million of institutional funding in February 2006 to aid growth. [DL 1]
- Adscape, Inc.: Purchased by Google in February 2007. Adscape's chairman, Mr. Stolar, is a well-connected veteran of the games business, having previously served as an executive at Sega, Sony's U.S. games division, and Atari. Adscape could help Google form crucial partnerships with publishers to move into the in-game advertising industry. [DL 2] [DL 3] The Adscape model hopes to differentiate itself from Massive and Double Fusion by what it calls the Real World/Virtual World Gateway, or RVG, a proprietary technology that exploits the "connection between in-game ads and the real world." [YY3]

- **Double Fusion, Inc.**: Founded in 2004, Double Fusion is the leading independent provider of dynamic in-game advertising. Going beyond traditional advertising mediums to engage valuable and hard to reach gamer demographics, Double Fusion provides the widest range of in game advertising and marketing programs, from dynamic 3D interactive objects, video, interactive ads, 2D signage and more, all the way up to fully immersive storyline integrations. Developers and Publishers use Double Fusion's tools to easily and seamlessly incorporate advertising into their games on platforms such as PS2 and Xbox.
- Extent Technologies, Inc.: Established in 1992, Exent Technologies is the leading global market solutions provider for broadband-based monetization of new and existing PC and video games. Exent's product line supports multiple solutions, including digital distribution of video games, platform enablement, in-game advertising, and community building solutions.
- Navigame, Inc.: Offers solutions such as strategy consulting and evaluation to push ads onto game spaces. [X2]
- **Engage, Inc.**: Engage is a single-source video game advertising network reaching consumers immersed in console, PC, and mobile video games. Like Massive, Engage offers advertisers full access to the latest in-game advertising opportunities that effectively connect with men aged 18-34, women 25-54 and teens 13-17.[T2]
- **Greystripe, Inc.**: Greystripe makes use of their patent-pending AdWRAP technology, which automatically adds the AdWRAP advertising client to mobile games and applications. This fundamental technology has enabled the AdWRAP system to rapidly achieve mass scale while maintaining extensibility for new ad formats, calls-to-action, and targeting. Greystripe is reaching millions of mobile game players through its AdWRAP Catalog Program distribution partners and through GameJump.com, the world's largest free, adsupported mobile game portal. Mobile advertising is projected to be a \$10 billion market by 2009. [FG 1]

Fran Kennish, [T<sub>3</sub>] director of strategic planning at MEC MediaLab, suggested the following guidelines for successful in-game advertising:

- A brand's presence should enhance the gaming experience
- Brand and commercial content must be relevant to the game
- Brands should feel like a natural part of the game
- Customization can strengthen gamers' engagement with a brand

• In-game communication must be measurable

#### MASSIVE, INC. - COMPANY BACKGROUND

## Founding of Massive

Founded in 1995, Massive Inc. offered in-game advertising sales and middleware to accelerate the development process for PC and console games. Massive's founder and CEO, Mitchell Davis, had been a self-proclaimed entrepreneur since the age of 24. After starting a few companies and working at Encyclopedia Britannica, managing their Internet and CD businesses, Davis was ready to explore a new market. He was intrigued by the video game space because of the great potential in its fast-paced and high growth environment. Playing Grand Theft Auto for research, he noticed the numerous fictitious advertisements in the game. It dawned on him that if real advertisements were used instead, it could be a new avenue for advertising that could increase game revenue and enhance game realism. He predicted that in-game ad spending would land somewhere between \$1.6B and \$1.8B in the U.S. by 2010, accounting for roughly 3% of total media spending. In 2003, two weeks after he came up with this idea, Davis and his team had developed the first version of their product, which they took to E3, an annual trade show for the computer and video games industry. [6]

Massive's new technology allowed advertisers to dynamically swap non-invasive advertisements in and out of video games using the Internet. With 40 game publishing partners and more than 100 committed titles by 2007, the Massive Network offered advertisers the ability to reach an aggregated gaming audience in real-time across multiple platforms. Over 100 blue-chip advertisers had run campaigns across the Massive Network throughout North America and Europe.

Publishers in the Massive Network generated revenue through dynamic in-game advertising, enabling them to leverage the value of their time-sensitive content while preserving and enhancing the game experience. Massive sold advertising to advertising agencies and individual advertisers. At the end of each month, Massive sent out invoices for campaigns that aired across the Network. The advertisers then paid Massive, and Massive remitted some portion of this revenue back to the publishers based on the traffic that their games drove for each campaign. Since its launch, Massive has served ads to over 35 million gaming sessions, and it has partnered with video game developers and publishers including Atari, Eidos, THQ, 2K

Sports, Ubisoft, Konami, Nielsen Entertainment, and Sony Online Entertainment. Their advertising clients include Coca-Cola and Honda.

The Massive Network thus represented a complete technology and media solution. The network brought together publishers, developers, advertisers, and gamers, all of whom benefited from the realism that advertising brought to video games across all platforms. Massive's technology allowed for all forms of downloadable media and advertising content to be contextually integrated into the game environment, including image, audio, video and game object formats. While there was concern that advertising could be intrusive to game players, Massive CEO Mitch Davis stated in a 2006 interview that "Fundamentally, our mission is to improve the realism of the game." He added that advertising must be carefully selected to appeal to gamers and not seem out of place in the virtual world. By aggregating the largest audience of gamers and providing real-time delivery of advertising across top-selling video games, Massive could provide publishers and developers an additional \$1-\$2 profit per unit shipped for their titles. This increased revenue helped to offset the rapidly increasing cost of game development and had the potential to mitigate production costs on "risky" games, which could in turn lead to more innovative products.

## The Financing of Massive

Massive, Inc. underwent three rounds of funding prior to being acquired by Microsoft, Inc.:

- Series A (September 2003): Massive Incorporated received \$2.1 million in financing, including investments from Tobat Capital and Newlight Associates (Exhibit 8). "Massive has identified an opportunity to provide middleware solutions to the \$20 billion dollar gaming industry, an industry that is growing over 10% annually," said Ian D. Packer, General Partner of Tobat Capital. "Massive has an opportunity to make a major contribution to the online gaming industry by creating an entirely new revenue stream for publishers and developers with in-game advertising on PC games. We are delighted to be a part of this team," said Robert Raucci, General Partner of Newlight Associates. [A3]
- Series B (July 2004): Massive received \$5.5 million from Draper Fisher Jurvetson (DFJ) Gotham, RRE Ventures, Tobat Capital and Newlight Associates in an oversubscribed round. Chip Meakem (principal at DFJ Gotham) and Andrew Zalasin (general partner at RRE Ventures) joined Massive's board of directors. [X5]

• Series C (January 2005): The third round funding of \$10 million was led by NeoCarta? Ventures and was joined by previous investors DFJ Gotham, DFJ New England, RRE Ventures, Tobat Capital, and Newlight Associates. As a result, NeoCarta?'s Boston managing director Thomas W. Naughton joined Massive's board of directors. [A 4] [11]

## Product Launch / Technology

Massive got off the ground by making deals with Funcom (developer of MMORPG Anarchy Online) and Codemasters (Colin McRae Rally) in 2005. Massive expanded its in-game advertising through deals with other large developers such as Sony Online Entertainment, THQ, and Electronic Arts. As of March 2007, Microsoft's Massive video game advertising unit had developed a networking relationship with over 40 video game publishers. Approximately 200 games by companies including EA and Take Two now had advertising platforms embedded within them. Massive stated that it has already integrated 70 titles and expects around 100 video games to be embedded with its software by the end of 2007. [DL 5] "Our focus at Massive continues to be connecting blue-chip global marketing partners with the appropriate gaming audience through our relationships with major game publishers," said Cory Van Arsdale, a 12-year Microsoft veteran and the CEO of Massive since January 2007. "During the past two years we've defined the dynamic in-game advertising business and continue to renew previous marketing partnerships as well as welcome new marketing partners and publishers to the Massive network." The ad-serving technology developed by Massive allowed for seamless integration and targeted delivery of advertising elements. Using texture replacement, the game engine blended the advertisement into 2D or 3D games with no noticeable effect on network bandwidth or computer resources.

## The Massive / Microsoft Deal

Microsoft acquired Massive on April 24, 2006. The Wall Street Journal reported the price at between \$250 million and \$400 million, though one Xfire investor claimed the transaction was closer to \$100 million.

According to people familiar with the software giant's plan, it intended to tie its brokering service with Massive's network. Microsoft's long-term goal was to have one unified online service from which advertisers could purchase ads across a broad range of Microsoft products. That vision would take time to realize; for now, the Massive network would be part of a palette of advertising offerings Microsoft salesmen would offer clients. [1]

At the MSN Strategic Account Summit in 2006, Microsoft CEO Steve Ballmer expressed his company's commitment to "an ecosystem for online advertising of advertisers and agencies and search engine marketing companies." Microsoft saw the significance of in-game ad-

vertising, realizing that it could help to offset the rising cost of game development, and decided to acquire Massive Inc. as a result. According to Microsoft's Kevin Browne, the ad business would only needs to bring in \$1-2 per user in a \$50 retail game to create a 25-30% increase in profitability. [7]

At first glance, it appeared that the acquisition might create potential conflict with Massive's existing client list — in particular, with Microsoft's competitors, such as Sony Entertainment Online. Analysts also worried that Microsoft might limit Massive to serving only Xbox Live subscribers.[8] However, both Microsoft and Massive viewed the acquisition as a potential for growth and industry consolidation. Rather than barring Sony and Nintendo from using Massive services, Microsoft encouraged its competitors to sign up with Massive, under the belief that video game players must see a unified advertising message for game advertising to be successful. The advertising message would be undermined if differences in ad-serving solutions interfered with game play. Additionally, Microsoft believed that joining forces with Massive would give Sony and Nintendo access to the \$2B annual MSN business.[7] Thus, on the whole, Microsoft appeared to prefer an open approach to in-game advertising.

MICROSOFT, INC. WITHIN THE VIDEO GAME INDUSTRY

## Role as a Game Publisher / Developer

Since the mid-1990s, Microsoft had been a major contributor to video game software in the PC market, with publishing rights to MechWarrior, Age of Empires, Dungeon Siege, and Flight Simulator. However, observing the rapid growth of the profitable video game industry, Microsoft wanted to step up its presence in this market. Rather than purchasing a video game company or merging with an existing player, the company decided to start from scratch. Ultimately, Microsoft entered the game console industry in 2001 with the Xbox. Meanwhile, the Microsoft Game Studios brand was introduced in 2002 for products developed in-house or as first-party software for the Xbox console. Next to the original development teams, Microsoft also set up or acquired a number of studios, including Bungie, Carbonated Games, Ensemble, FASA Interactive, Lionhead, Rare, Turn 10, and Wingnut Interactive. [10] According to a Deutsche Bank Securities research report, Microsoft held 17% market share with its Xbox games in 2003.

Since 2001, Microsoft had introduced both the Xbox Live service for online multiplayer games and the Xbox 360 as the second generation of the console. Both the Xbox and Xbox Live service thus represented target platforms for in-game advertising. Furthermore, the

Xbox 360 also served as a home entertainment system that could store and play music and DVDs, thus allowing Microsoft to approach the consumer's living room with a variety of media. Meanwhile, Xbox Live offered a complimentary 'silver' level service to Xbox 360 players who used a broadband connection with their system. With this service, gamers had access to the Xbox Live Marketplace, a forum used to download demos and trailers to the Xbox 360's hard drive. Additionally, a silver Xbox Live subscription offered access to new game content, traditional card and board games, and community-created content. Players could also send and receive text and voice messages.

Microsoft also provided online games through its MSN (now rebranded as Windows Live) web properties. Generally simpler than console games, MSN games targeted more casual gaming audiences.

## Acquisitions

Microsoft had acquired many gaming and advertising companies since 1996 (Exhibit 13). Acquisitions of game development houses such as Bungie Studios in 2000 had allowed the company to shift the development of hit titles, such as Bungie's Halo: Combat Evolved, to its Xbox platform. Halo was originally launched as an Xbox exclusive, which gave Microsoft the "killer application" it needed to boost its console sales.

In August 2002, Microsoft acquired game developer Rare, Ltd., thereby obtaining the rights to Rare's IP, including the Perfect Dark and Banjo-Kazooie franchises.

An announcement on April 6th, 2006, brought news that Microsoft Game Studios had purchased Lionhead Studios for an undisclosed sum, to further bolster the range of exclusive titles it could provide for the Xbox 360 platform. Finally, during May 2006, Microsoft acquired Massive Inc. to provide additional revenue for their games and platforms.

## Role as an Electronic Advertising Network

The Massive acquisition was part of a broader Microsoft strategy to build a dominant position in the booming online advertising market, which had fueled the growth of Google Inc. and others. However, Microsoft struggled to become a more prominent figure in this market, as Google extended its lead in online advertising.

It therefore came as no surprise to many observers that Microsoft wanted to establish its own in-game advertising service. Although it was unclear to what extent in-game ads would allow Microsoft to compete with Google, due to the relative infancy of the market and many complex forces influence its growth, Microsoft believed that such an offering could fit nicely with the company's efforts to develop adCenter, a targeted advertising service. The

question was whether it would acquire a company or build its own. Alex St. John, who had worked on game strategy at Microsoft in the mid-1990s and now headed Redmond online game publisher Wildtangent, observed: "Historically, Microsoft would have built this kind of plumbing themselves in a heartbeat." St. John speculated that Massive may have offered key intellectual property desired by Microsoft.

Massive had relationships with many key players in the video game industry, a solid ad-sales group, and an innovative ad-serving technology. It also brought significant expertise and insight. Although Microsoft already had relationships with most major developers and publishers and had a bigger and more experienced ad-sales group than Massive's, the company decided to move forward with the acquisition of Massive rather than trying to develop an in-game advertisement offering in-house. This gave Microsoft the opportunity to gain an important position in the exponentially growing market of in-game advertising.

When Kim Pallister, head of business development and developer relations for Microsoft's Casual Games Group, was asked if in-game advertising is going to be important to the video game industry in the future, he responded that it would continue to grow as a significant segment of video game revenues. "As with movie and TV product placement, games that do a good job of it won't be considered an affront, those that don't will be panned by gamers and critics," explained Pallister. [T<sub>4</sub>]

At the time of its acquisition, Massive targeted games for Internet-connected personal computers and Microsoft's Xbox / Xbox 360, but it planned to expand to other consoles, including Sony's PlayStation 3 and the Nintendo Wii. The company's acquisition by Microsoft therefore represented another important way for Massive to expand. "Joining forces with Microsoft will allow Massive to deliver even greater benefits for advertisers, game developers and gamers through one of the world's largest, most comprehensive online networks," said Massive CEO Mitchell Davis. "With Microsoft we have the prospect of extending our technology into a vast array of new markets and online environments." Microsoft also began to explore how to apply Massive technology to incorporate dynamic advertising into other online environments such as Windows Live<sup>TM</sup> and MSN, and make it available to mobile users of Windows Live<sup>TM</sup> and the adCenter advertising platform.

Microsoft Casual Games, which developed, published, and distributed web-based and down-loadable games, soon unveiled a new initiative that would allow developers to receive up to 20% of the in-game advertising revenues generated by their titles. The Ad-Share Program, which covered titles hosted on MSN Games, was designed to motivate developers and give advertisers a means of reaching consumers over a longer period of time. At the first level of this two-tiered program, developers gained 10% of ad revenue with no additional requirements for the games. At the second level, developers received a 20% share, but games had to

be submitted for an ESRB rating, which increased development time by adding additional phases to the process, such as localization. In addition, Level Two games were required to offer "a deluxe game experience" that lasted for at least 10 hours. Microsoft predicted that the top five participants in the Ad-Share Program would share more than \$250,000 annually.

On May 18, 2007, Microsoft announced that it would acquire one of the last independent web advertising companies, aQuantive Inc. The deal was expected to cost Microsoft \$6B, which represented an 85% premium to shareholders of aQuantive.[TJ2] This was Microsoft's largest acquisition to date, showing their commitment to beating Google in the online advertising market. Meanwhile, Google had bought online advertising company Double-Click for \$3.1 B in April 2007. Later that same month, Yahoo had acquired competitor RightMedia for \$680M. Finally, in late May 2007, WPP Group acquired yet another company in this space, 24/7 Real Media, for \$649M.

By 2007, the online ad market brought in \$40B annually and was growing by 20% annually. Microsoft was therefore committed to securing their share of the market. They aimed to consolidate their inventory from various Microsoft properties sites to create more scale for their ad network.

## Statements Regarding the Acquisition of Massive, Inc.

Microsoft's co-president of the Platforms and Services division, Kevin Johnson, said in a statement that the acquisition of Massive would "expand opportunities for advertisers and enable connection to a broader audience of digital consumers." Massive CEO Mitchell Davis added that his company now had the prospect of extending its technology into a "vast array of new markets and online environments."

"That Massive team will be joining Microsoft and the MSN group," said Robbie Bach, president of Microsoft's entertainment and devices group, speaking at the MSN Strategic Account Summit. "They will become a key part in what we are doing in this space." Bach further commented that video game advertising was a potentially great opportunity, but also had to be approached carefully. "Make sure whatever you do doesn't interfere with the game playing experience," he said. "Do not interrupt someone when they are gaming. It is a very immersive experience." However, he said, if the ads were well-placed and seamlessly integrated, the message could be very effective. "[Gamers] get it, and they may not even know they got it.". During the MSN Strategic Account Summit 2006, Yusuf Mehdi, Senior Vice President and Chief Advertising Strategist with Microsoft also emphasized the need for "Contextual Advertising" in the video gaming industry. [GT1]

Meanwhile, Microsoft's Corporate Vice President of Global Sales and Marketing and Chief Media Revenue Officer, Joanne Bradford, said in a statement that "advertisers are having a tough time connecting with the elusive 18- to 34-year-old male demographic because this group continues to spend less time watching TV and more time playing video games. Massive and Microsoft can help lead with our shared vision of delivering more targeted, measurable and effective opportunities for advertisers to reach today's youth audience in a largely untapped market."

To date, most in-game advertisements had appeared in online games played on PC's. Microsoft's interest in Massive was an indication that more ads for console games were on the way, according to Evan Wilson, an industry analyst with Pacific Crest Securities.

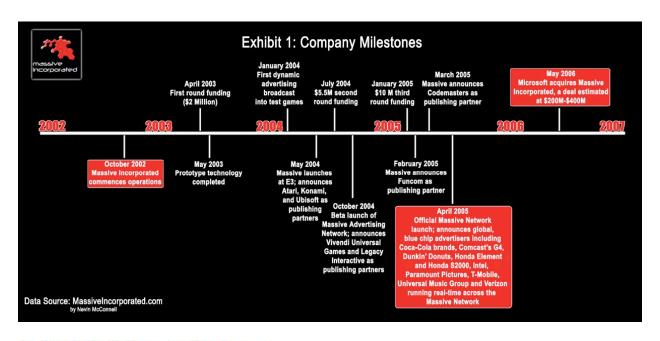
Microsoft planned to integrate Massive's dynamic ad solutions into a number of services, beginning with Xbox Live and Xbox 360 titles, but eventually stretching to other online activities, such as its casual games space through MSN and Windows Live.

#### EXHIBITS

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## Exhibit 1 - Company Milestones



## Exhibit [Ar1] Massive Partners:



## Exhibit 2: In-Game Advertising Market and User Experience

## US Video Game Advertising Spending, by Segment, 2006-2011 (millions)

•	2006	2007	2008	2009	2010	2011
In-Game*	\$182	\$295	\$403	\$511	\$589	\$625
Advergaming**	\$164	\$207	\$262	\$311	\$339	\$344
Total	\$346	\$502	\$665	\$829	\$928	\$969

Note: includes product placement/integration, and excludes mobile games; \*includes static, dynamic and rich media ads; \*\*refers to games wholly designed with the intention of promoting a product Source: eMarketer, April 2007

083594 www.eMarketer.com

US Video Game Advertising Spending, by Segment, 2006-2011 (millions)

## US Consumers and Video Gamers Who Are Aware of and/or Have Seen In-Game Advertisements, by Age, June 2006

Consumers		Video gamers	Aware of in-game ads	Have seen in-game ads		
12-17	25,453,456	20,110,430	14,077,301	10,557,976		
18-24	29,453,456	14,726,728	11,045,046	7,400,181		
25-34	40,142,912	19,268,598	12,331,903	8,632,332		
35-44	43,862,464	20,615,358	10,513,833	6,518,576		
45-54	42,482,265	15,293,615	7,035,063	3,939,635		
55-64	30,355,541	7,285,330	2,768,425	775,159		
65+	36,790,113	5,150,616	1,751,209	350,242		
Total	248,224,789	102,450,675	59,522,780	38,174,101		

Note: n=1,250 ages 12+

Source: Interpret with US Census Bureau data, January 2007

082183 www.eMarketer.com

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US Consumers and Video Gamers Who Are Aware of and/or Have Seen In-Game Advertisements, by Age, June 2006

# PC Gamers in Europe Who Believe that In-Game Advertising Makes the Experience More Realistic, 2005 (% of respondents)

Agree 50%

Disagree 21%

Note: based on testing of various forms of ads in the PC game "London Taxi" by Metro3D

Source: Nielsen Interactive Entertainment commissioned by Double Fusion, October 2005; CNET, October 2005

072229 www.eMarketer.com

PC Gamers in Europe Who Believe that In-Game Advertising Makes the Experience More Realistic, 2005

# PC Gamers in Europe Who Believe that In-Game Advertising Catches Your Attention, 2005 (% of respondents)

Agree 54%

Disagree 17%

Note: based on testing of various forms of ads in the PC game "London Taxi" by Metro3D

Source: Nielsen Interactive Entertainment commissioned by Double Fusion, October 2005; CNET, October 2005

072230 www.**eMarketer**.com

PC Gamers in Europe Who Believe that In-Game Advertising Catches Your Attention, 2005

# Exhibit 3: Screen-shots of In-Game Advertising Served by Massive Engine













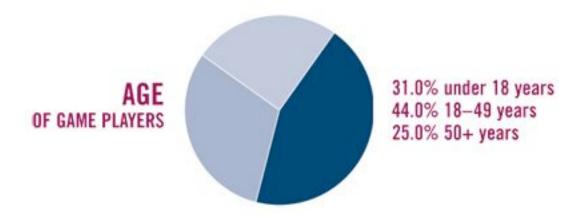




Exhibit 4: Video Game Player Demographic in 2006

The average game player age is:

33



Source: Entertainment Software Association: <a href="http://www.theesa.com/facts/gamer\_data.php?">http://www.theesa.com/facts/gamer\_data.php?</a>

### AD SPENDING BREAKDOWN, BY MEDIUM

(In millions of dollars)

					1			
	2001	DVERTISING EX E2006	(PENDITURES ( F2007	(MIL.\$) F2008	2001	PERCENT E2006	OF TOTAL F2007	F2008
Magazines	21,540	25,228	26,705	28,329	9.5	9.4	9.5	9.7
Consumer	15,930	19,597	20,832	22,186	7.0	7.3	7.4	7.6
Business-to-business	5,610	5,630	5,872	6,143	2.5	2.1	2.1	2.1
Newspapers	45,778	51,744	53,037	54,098	20.2	19.2	18.9	18.5
Television	49,714	57,966	59,653	61,718	21.9	21.5	21.3	21.1
Network	15,643	18,290	18,839	19,592	6.9	6.8	6.7	6.7
Spot	22,000	23,253	23,486	23,721	9.7	8.6	8.4	8.1
Cable	9,834	13,780	14,607	15,629	4.3	5.1	5.2	5.4
Syndication	2,236	2,643	2,722	2,776	1.0	1.0	1.0	1.0
Radio	18,800	20,903	21,222	21,548	8.3	7.8	7.6	7.4
National	1,000	1,105	1,127	1,152	0.4	0.4	0.4	0.4
Local	17,800	19,799	20,095	20,397	7.9	7.4	7.2	7.0
Outdoor	4,814	6,344	7,040	7,826	2.1	2.4	2.5	2.7
Billboards	2,274	2,839	3,009	3,190	1.0	1.1	1.1	1.1
Other out-of-home	2,540	3,506	4,031	4,636	1.1	1.3	1.4	1.6
Internet	6,600	12,490	14,363	15,656	2.9	4.6	5.1	5.4
Cinema	NA	460	529	608	NA	0.2	0.2	0.2
Direct mail	39,930	45,922	47,530	49,431	17.6	17.1	16.9	16.9
Other/Misc.	39,334	48,058	50,557	52,731	17.4	17.9	18.0	18.1
TOTAL	226,510	269,114	280,636	291,945	100.0	100.0	100.0	100.0

E-Estimate. F-Forecast. NA-Not Available. Source: ZenithOptimedia.

## **TOP 15 CATEGORIES BY AD SPENDING — 2005**

(Ranked by total US ad spending)

TC	TOTAL US AD SPENDING 2005 % CHG FR.			SPENDING BY MEDIA (MIL. \$)					
	(MIL. \$)	PREV YR.	PRINT B	ROADCAST II	NTERNET O	UTDOOR			
1. Automotive	20,959	(3.4)	8,738	11,448	422	351			
2. Retail	18,630	(0.7)	8,769	8,467	1,035	359			
3. Telecom, Internet, ISP	9,896	4.0	3,014	5,137	1,525	219			
4. Financial services	8,477	8.2	3,126	4,073	1,032	246			
5. Drugs & remedies	8,442	1.8	2,522	5,511	390	18			
6. General services	7,868	7.9	3,111	3,544	715	498			
7. Food & beverages	7,313	3.9	2,011	5,113	109	80			
8. Direct response	6,101	15.1	2,905	3,040	154	1			
9. Personal care	5,648	1.8	2,275	3,269	79	25			
10. Movies & media	5,582	1.8	1,563	3,798	116	105			
11. Airlines & travel	5,546	2.8	3,034	1,705	513	294			
12. Restaurants	5,062	5.6	358	4,432	45	226			
13. Media	4,913	12.6	2,992	1,110	543	268			
14. Gov., politics, religion	4,602	(9.0)	818	3,489	172	124			
15. Insurance	2,894	16.2	569	2,066	162	97			

ISP-Internet Service Provider.

Source: Advertising Age.

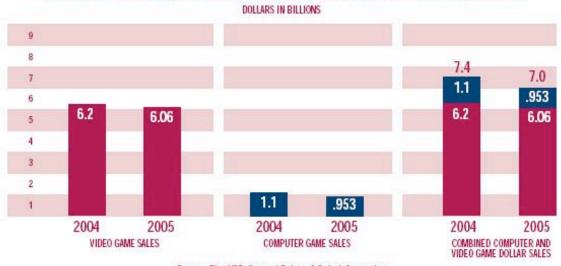
	MAGAZINE	NEWSPAPER	OUTDOOR	TV	RADIO	INTERNET	YELLOW PAGES	OTHER	TOTAL A SPENDIN
. Procter & Gamble	826.1	186.6	4.5	2,311.5	48.3	33.5	0.0	1,198.3	4,608
2. General Motors	497.8	583.9	52.1	1,635.0	124.5	110.5	0.0	1,349.5	4,353
3. Time Warner	352.9	360.3	64.7	969.9	147.4	166.1	0.0	1,432.4	3,493
I. Verizon Communications	57.4	625.7	53.5	675.5	195.5	144.0	11.8	720.3	2,483
5. AT&T	46.9	643.0	56.2	671.2	204.6	56.2	10.2	782.4	2,470
6. Ford Motor	339.0	190.1	19.4	922.5	42.5	55.0	14.5	815.5	2,398
7. Walt Disney	186.4	219.9	46.0	714.4	155.9	90.3	0.0	865.9	2,27
3. Johnson & Johnson	410.3	42.4	2.3	874.0	32.4	24.6	0.0	823.3	2,20
9. GlaxoSmithKline	265.3	36.7	1.8	823.6	21.4	14.1	0.0	1,031.3	2,19
). DaimlerChrysler	312.2	225.9	11.3	973.8	35.6	31.6	0.0	588.2	2,17
l. Pfizer	240.9	56.0	0.6	541.0	23.1	20.9	0.0	1,270.0	2,15
2. General Electric	147.4	209.2	33.1	563.9	135.9	36.8	4.5	785.9	1,91
3. Toyota Motor	239.8	76.9	16.3	685.3	24.3	32.9	0.0	709.0	1,78
I. Sony	146.1	158.4	18.6	593.5	34.9	44.1	0.0	782.3	1,77
5. Sears Holdings	60.1	246.6	1.2	480.6	27.3	6.4	0.0	890.7	1,71
6. Sprint Nextel	68.6	546.9	29.8	546.6	55.5	26.6	6.4	382.4	1,66
7. McDonald's	65.9	5.0	51.1	551.7	78.5	12.5	0.0	897.5	1,66
3. Unilever	248.9	38.1	13.8	436.0	11.0	13.4	0.0	761.1	1,52
9. Viacom	120.6	154.8	31.9	474.3	80.0	36.3	0.0	598.7	1,49
). Altria Group	543.3	43.8	1.1	573.4	11.9	15.0	0.0	297.1	1,48
l. PepsiCo	195.0	27.9	15.1	811.7	60.5	19.1	0.0	337.4	1,46
2. ĽOréal	344.1	33.9	4.1	404.1	0.6	6.9	0.0	662.6	1,45
3. Federated Department Store	es 91.3	831.6	2.7	203.9	74.1	2.8	0.0	247.1	1,45
I. Nissan Motor	230.2	69.7	19.6	679.3	17.7	6.9	0.0	418.0	1,44
. Honda Motor	159.8	22.9	5.4	652.0	2.5	11.2	7.5	463.7	1,32

## Exhibit 5: Key Players In the Industry

- Microsoft (NASDAQ: MSFT)
- Electronic Arts Inc. (NASDAQ: ERTS)
- Activision Inc. (NASDAQ: ATVI)
- Konami Corp (NYSE: KNM)
- THQ Inc. (NASDAQ: THQI)
- Shanda Interactive Entertainment Ltd. (NASDAQ: SNDA)
- Take-Two Interactive Software Inc. (NASDAQ: TTWO)
- The9 Limited (NASDAQ: NCTY)
- WEBZEN Inc. (NASDAQ: WZEN)
- Atari, Inc. (NASDAQ: ATAR)

## Exhibit 6: Video Game / Game System Sales





Source: The NPD Group / Point-of-Sale Information

## U.S. COMPUTER AND VIDEO GAME UNIT SALES: 2004 AND 2005

UNITS IN MILLIONS 250.0 250 228.5 47.0 225 38.0 200 203.0 203.0 190.5 190.5 150 125 100 47.0 38.0 25 2004 2005 2004 2005 2004 2005 VIDEO GAME UNITS COMPUTER GAME UNITS COMBINED COMPUTER AND VIDEO GAME UNIT SALES

Source: The NPD Group / Point-of-Sale Information

## Exhibit 7: Video Interview with Massive CEO Mitch Davis

Massive CEO Mitch Davis: "Product Integration and Advertising in Video Games" July 15, 2005. <a href="http://easylink.playstream.com/snippies/massive/fullinterview.wvx">http://easylink.playstream.com/snippies/massive/fullinterview.wvx</a>

## **Exhibit 8: Investors**

#### **About Tobat Capital**

Tobat Capital is a Dallas, Texas-based private equity investor, which specializes in the financial services sector. Tobat makes venture capital investments in development stage companies whose strategy focuses on exploiting technology to improve both the distribution and processing of a wide range of financial products and services.

#### **About Newlight Associates**

The Newlight Associates funds invest equity capital in information technology companies. Founded in 1997, Newlight manages over \$100 million in assets from its offices in New York City and Long Island. The Newlight management team has over 70 years of venture capital investment experience and over 30 years of technology company operating experience.

#### **About NeoCarta Ventures**

NeoCarta Ventures is a leading venture capital firm specializing in early to mid-stage technology investments. The firm focuses on investments in IT infrastructure, software, hardware, networking, media and wireless. With offices in San Francisco and Boston, NeoCarta? partners' backgrounds include senior investment experience with outstanding track records at GE Capital, Intel Capital, Thomson, and NBC. NeoCarta? works closely with entrepreneurs and actively adds value by providing strategic guidance, team-building skills, industry knowledge, and operating expertise. With NeoCarta?'s unique mix of financial, operational,

and technical expertise, the firm is able to add value at all stages of a company's development.

Sources: www.nlventures.com, www.tobatcapital.com, www.neocarta.com,

## Exhibit 9: Marketing Channels

**Marketing Channels that US Marketers Are Currently** Using, Piloting or Expecting to Pilot within the Next 12 Months, December 2005 (% of respondents)

	Currently using	Piloting or expecting to pilot	No plans to use at all	Total adoption
E-Mail marketing	83%	10%	6%	94%
Search marketing	64%	16%	21%	79%
Behavioral targeting	38%	36%	27%	73%
Contextual targeting	37%	32%	31%	69%
Rich media e-mails	36%	31%	33%	67%
Rich media display ads	45%	22%	33%	67%
Blogs/social networks	13%	38%	49%	51%
RSS	10%	37%	53%	47%
Mobile marketing	11%	32%	57%	43%
Advergames/in-game advertising	13%	15%	72%	28%
Note: n=253				

Source: Forrester Research, May 2006

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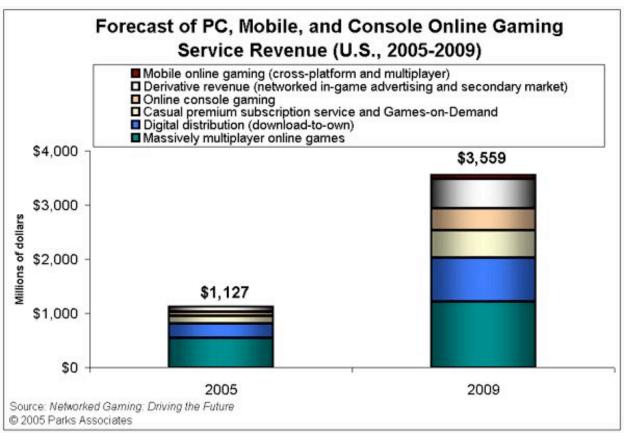
www.eMarketer.com

# Exhibit 10: In Game Advertising List

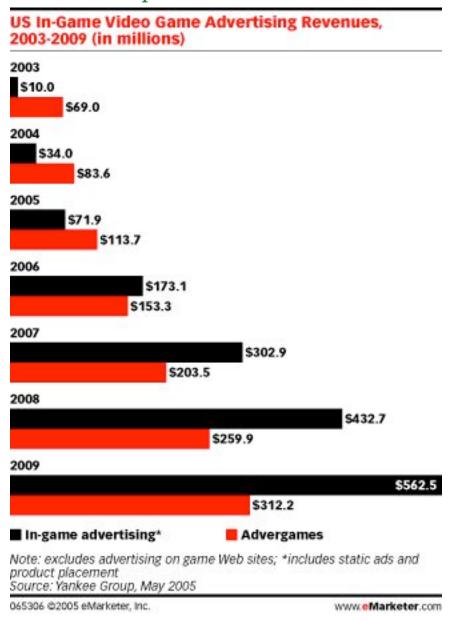
Advertiser	Game	
7 UP	SSX3	
Best Buy	Need for Speed Underground 2	
Burger King	Need for Speed Underground 2	
Cingular Wireless	Need for Speed Underground 2	
element skateboards	Tony Hawk Underground 2	
Home Depot	Nascar Thunder 2004	
Honda	SSX3	
Intel	The Sims Online	
Jeep	Tony Hawk Underground 2	
McDonald's	The Sims Online	
NAPA Auto Parts	Nascar Thunder 2004	
Old Spice	NCAA Football	
Oreo	Nascar Thunder 2004	
Palm PDAs	Splinter Cell	
Pepsi	Nascar Thunder 2004	
Puma	True Crime: Streets of LA	
Quiksilver	Tony Hawk Underground 2	
Samsung	Enter the Matrix	
So8e	Tony Hawk Underground 2	
Sony Ericsson Smart Phones	Splinter Cell	

Sources: Wong (2004), Loftus (2004), Duncan (2005).

# Exhibit 11: Forecast of PC, Mobile and Console Online Gaming Service Revenue by Parks Associates



# Exhibit 12: US In-Game Video Game Advertising Revenues, Yankee Group



# Exhibit 13: Video Game and Advertising Companies Acquired by Microsoft Corporation since 1996

#### 2007

- aQuantive, Inc, Seattle, USA May 2007 Global digital marketing and advertising solutions. Microsoft's largest acquisition so far, valued at \$6 billion. [GT2]
- screenTonic, Paris, France May 2007 [GT3] Mobile advertising solutions

#### 2006

- Massive Inc. May 2006 In-game-Advertising [GT4]
- Lionhead Studios April 2006 Games Developer [GT5]

#### 2002

• Rare Ltd., United Kingdom - September 2002 - Video games - \$375 million [GT6]

#### 2001

• Ensemble Studios, Dallas, Texas- May 2001 - Video games [GT7]

#### 2000

- Digital Anvil Inc., Austin, Texas December 2000 Video games [GT8]
- netGames USA, Overland Park, Kansas July 2000 Scoring, matchmaking and other enhancements for retail and Web-based games [GT9]
- Bungie Software Products Corp., Chicago, Illinois June 2000 Action oriented computer and video games [GT10]

#### 1999

- shadowFactor Software Inc., Waterloo, Ontario, Canada June 1999 Video games \$120 million [GT11]
- Access Software Inc. Hialeah, Florida April 1999 sports simulation software and adventure games [GT12]

• FASA Interactive Technologies, Chicago, Illinois – January 1999 - Video game division of long-ailing board game and role-playing game vendor

## 1998

• linkExchange Inc., San Francisco, California - November 1998 - advertising network - \$250 million [GT13]

## 1996

• EXOS Inc., Woburn, Massachusetts - April 1996 - Force feedback technology for game control devices [GT14]

## Exhibit 14 - Subway Advertisement in Valve's Counter Strike





## Exhibit 15 - Massive, Inc. Team

Massive Incorporated is led by veterans of the media, gaming and technology worlds who are uniquely positioned to successfully deliver this transformative, dynamic medium to the market and create an advertising network that will rival television.

## Cory Van Arsdale, CEO:

Cory has been at Microsoft for over twelve years and was just recently appointed to be CEO of the Massive Incorporated subsidiary delivering in-game advertising for PC and console games.

Cory graduated from Santa Clara University law school and the University of California at Santa Barbara. Prior his journey in Microsoft, he worked at Sun Microsystems, Apple and the start-up, Be, Inc. In his first few years in Microsoft, he has supported the developments of Window 9x, IE and Media Division. For the recent six years, he is focusing on supporting MSN, the global online service. The small team supporting this online service has now grown to 80+ persons. The team has also developed partner relationships which have brought in significant contribution margin to Microsoft.

### Carol Koh Evans, General Manager:

At Microsoft, Carol is responsible Microsoft's consumer initiatives such as MSN, Home Entertainment and Digital Media.

Carol received her MBA from Columbia Business School and her BS in Business Administration UC-Berkeley. She has worked at Lehman Brothers in New York and Hong Kong, Robertson Stephens in San Francisco and participated in GE's Financial Management Program. She has over 12 years of experience working in the technology, online media, and finance sectors.

## **Katherine Hays**, Chief Operating Officer:

Katherine received her MBA degree from the Harvard Business School. Katherine has an extensive background in general management and finance specific to the media industry. Her first job was working with Salomon Smith Barney in their media and communications practice. Later, she joined Goldman Sachs as a Equity Research Analyst, where she covered global media companies including AOL Time Warner, Disney, News Corp and Vivendi Universal, as well as headed the firm's digital and interactive media team.

**Jay Sampson**, *North American Sales Director*: Jay received a Bachelor of Fine Arts degree from the University of Arizona. Jay has over 15 years in the advertising and media sales industry. Sampson joined Microsoft in 1997 as the company's first media sales executive. Sampson has held a number of positions within Microsoft, and currently works with Microsoft's product groups to develop advertising solutions for many Fortune 500 marketers. Sampson has previously worked in Dow Jones & Company in a variety of positions.

**David Sturman**, *VP of Technology*: Dr. Sturman is a founding member of Massive Incorporated, and has played the role of CTO and VP of Technology. Sturman received his Ph.D. from MIT Media Laboratory.

Sturman brings considerable experience, having done technology based work at Bell Labs, NYIT, MIT, and Medialab Paris. Sturman has also been VP of Technology at MaMaMedia, and CTO at Acclaim Entertainment, a now defunct console video game developer and producer. [TJ<sub>3</sub>]

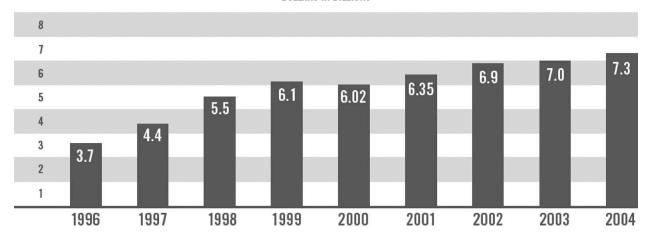
**Claudia Batten**, *VP of Client Relations*: Batten has six years of experience in the technology sector, including four years as a corporate attorney specializing in contracts and technology law. Co-founded Massive.

**Alison Lange**, *Marketing Director*: Alison has twelve years of experience in the media industry. At Massive, Alison runs the company's Marketing, Market Research and Public Relations initiatives. Before working at Massive, Alison worked in HBO in the Subscriber's Marketing and Business Development. She has also worked at Goldman Sachs's Media & Entertainment Investment Banking Division and CBS Television Network's Advertising Sales & Sprots Programming Division. She holds an MBA from The Wharton School at UPenn, and a BA from UCLA.

## Exhibit 16: Growth of Computer and Video Game Sales

# U.S. COMPUTER AND VIDEO GAME DOLLAR SALES GROWTH

**DOLLARS IN BILLIONS** 



Source: 2005 Essential Facts, Entertainment Software Association

## Exhibit 17: Selected YouTube Clips

In Game Advertising: First half shows examples of in-game advertising. Last half with the news of MS acquisition of Massive.

http://www.youtube.com/watch?v=PHa-itiWPwA

Eyetracking shows patterns of engagement with in-game ads: Interesting video with interesting comments.

 $\underline{http://www.youtube.com/watch?v=Jh7qYtWUucA}$ 

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[GT11] Microsoft Acquires Software Manufacturer ShadowFactor http://www.microsoft.com/presspass/press/1999/Jun99/ShadowPR.mspx>

[GT12] Microsoft to Acquire Access Software <a href="http://www.microsoft.com/presspass/press/1999/Apr99/AccessPR.mspx">http://www.microsoft.com/presspass/press/1999/Apr99/AccessPR.mspx</a>

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(20/)	பாக	occinan

- (221) James Mao
- (155) Joseph Gilbert
- (144) Bradford Bonney
- (140) Arif Cam
- (103) Onder Ahmet
- (102) Gloria Lin
- (83) Nevin McConnell
- (79) Igino Cafiero
- (76) Enxin Li
- (74) Athanasios Bismpigiannis
- (73) Tristan Johnson
- (67) Erin Hsu
- (67) Jonathan Solnit
- (66) Prabhu Balasubramania
- (63) Hsiang-Wen Lin
- (61) Hao Liu
- (53) Minggang Guo
- (48) Jason Min
- (47) Yi Gu
- (45) Itai Katz
- (44) Christina Mester
- (43) Daniel Wu
- (42) Guarav Thareja
- (42) Jenny Hu
- (41) Adam Zerda
- (34) Sumit Mehra
- (31) Sanghyup Kwak

- (30) Yuye Zhang
- (28) David Chanady
- (28) David Lau
- (27) Lu Shen
- (26) Wei Hsu
- (25) Assad Alam
- (21) Brian Park
- (19) Daxia Ge
- (19) Stephanie Leung
- (18) James Lin
- (18) Stephanie Kwan
- (17) Adam Zerda
- (15) Philip Fung
- (11) Young Hwan Kim
- (10) Axel Cornell
- (9) William Liou
- (9) Andrew Wong
- (8) Dingting Wang
- (8) Tiffany Yun
- (7) Kevin Gabayan
- (6) Yiwen Rong
- (5) Jiajing Xu
- (5) Minggang Guo
- (4) Woong Jun Jang
- (3) Francisco Godoy
- (3) Tse-Chiang Wang
- (2) Shaan Patel