

WHITE PAPER

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ELSPA

Entertainment and Leisure Software Publishers Association

CHICKS and JOYSTICKS

an exploration of women and gaming



About ELSPA

ELSPA (The Entertainment & Leisure Software Publishers Association) was founded in 1989 to establish a specific and collective identity for the computer and video games industry. Membership includes almost all companies concerned with the publishing and distribution of interactive leisure software in the UK.

ELSPA's activities include: **Official Chart and Industry Reports, Anti-Piracy UK and EU, PR and Communication, Events.**

More information on all these activities can be found at <http://www.elspa.com>.

The UK Interactive Leisure Software Industry Facts & Figures from ELSPA/Screen Digest/Chart-Track:

- The UK is a world centre for games development.
- In 2003, UK sales of video games, other leisure software products and games consoles topped £2 billion, for the second year running.
- Over 20,000 people are employed in the UK leisure software sector.
- The British games industry generated £494m of exports in 2003. 33% of all PS2 games bought in Europe originate in the UK (the same proportion as US originated products and ahead of Japan and any other country).

About Author

Aleks Krotoski has worked on the periphery of the games industry since 1999, first as a reviewer on Channel 4's Bits and Thumb Bandits and later as a feature writer for The Guardian, Edge and BBCi. She currently co-writes The Guardian's gamesblog at <http://blogs.guardian.co.uk/games>.

She is studying the interactive entertainment medium as part of her PhD in Social Psychology at the University of Surrey, focussing on the effect of play in Massively Multiplayer Online Role Playing Games on personal identity, attitudes and offline behaviour.

Aleks regularly speaks about the potential role of women in the games industry at organisations as varied as The American Cultural Association and the British Screen Advisory Council. She is the Resource Coordinator for the Women in Games Development Committee, and sits on the steering committees of the Women in Games Conference UK and the Edinburgh International Games Festival.

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Executive Summary

What is the current role of women consumers in the UK games industry? This deliverable, “Chicks and Joysticks: An exploration of women and gaming” White Paper, pulls together some of the statistical and academic research into the contemporary understanding of how, pragmatically and conceptually, the female audience and female employees affect the €20bn global computer and video games market, with particular reference to UK and Europe. These findings are aimed at industry professionals, Information and Communication Technology policy makers and educational institutions.

It includes:

- The history of women in computing, covering both women’s roles in computing in general, and the history of women in computer gaming.
- Past and current inclusion initiatives, considering the girl games movement of the late 1990’s through to its current iterations.
- Gender-inclusive design highlights that grown women and men enjoy similar things in their computer leisure; they simply use play differently. Both populations engage with narratives which offer the opportunity for exploration on the player’s own terms, immersion and community formation, although this appears more salient for women.
- An overview of the current demographics of female computer games players, reflecting the increase in age of games players in general, and the large number of UK female gamers in particular. 27.2% of all active gamers in the UK are women. Their average age is 30-35 years old. Furthermore, UK female players spend more on games than any other demographic in Western Europe except British males. There are special sections on online browser-based gaming and massively multiplayer gaming, both of which feature up to a 60% female games player base.

These numbers are explored within the contexts of leisure, economics and social interaction, with the first examining time constraints and their effect on the choice of game, the second examining financial issues associated with the choice of game and the last looking in-depth at one aspect regularly considered key in developing games for the female bracket.

- The UK’s female games industry workforce section looks at the numbers of women involved in the creation of games, and the universally positive response of both industry professionals and gamers to their contributions. It also explores entry avenues for potential female employees, and communities of like-minded women which greet them when they are there.
- Special sections focus on the success stories of three titles, The Sims Online, EyeToy Play and SingStar, which have attracted a previously under-tapped segment of the female audience, and feature greater-than-average numbers of women on the development team.

This White Paper aims to draw attention to the fact that women are an important part of computer gaming, both as contributors and consumers. Future research will further break down the findings contained herein, with implications for the composition of the computer games industry and the development of interactive entertainment with this population particularly in mind.

Introduction

The games industry has been one of the fastest growing sectors of the late 20th and early 21st centuries. In 2004, the worldwide worth stood at €20bn for software and hardware (ISFE, 2004) and projections for the future of the combined markets indicate a rise to €35.8bn by 2007 (Kane, 2004). PAL territories alone account for €5.3bn and, within that region, the UK software market is valued at €1,632.4m (ISFE, 2004).

This bullish trend has been supported by the consistent traditional audience of 15-25 year old boys, but the output of the industry is rapidly overtaking the relative intake from this important demographic, and increasingly developers and publishers are looking elsewhere to maintain their profits. Some analysts suggest that India, Asia and the Pacific may be the source of the next boost, but others suggest diversification at home. Where better to look than at the €14bn of disposable income in the purses of the potential female audience?

Women are an important part of the burgeoning business model of the future of the games industry. Developers and publishers are courting the Louis Vuitton purses of the fairer sex, with titles that consider their needs, their desires and their modern, active lifestyles.

Technological advancement has opened the doors for the design and development of software and hardware which appeals to this group of gamers. Manufacturers of alternative gaming technologies like mobile phones have exploited the powers of new computer chips to increase the interactive applications on their hardware that appeal to their female consumers. Internet designers have discovered new gaming revenue streams that attract this group in particular. Out of these considerations has grown a broader player base, which is translating into a strong female games industry workforce, thus escalating the balance between the sexes in studios and increasing gender-inclusive player styles in their output.

This paper examines the role of women in computer gaming, as an audience and contributors to the future of interactive entertainment. It will show that women are a mounting force behind the scenes and at the tills, and that their inclusion is ushering in the era of games as a mass market phenomenon. Specifically, it will focus on:

- The history of women in computing
- Past and current inclusion initiatives
- Current demographics of the worldwide female games playing market
- Gender-inclusive design considerations
- Current demographics of the female UK games industry workforce
- Success stories that herald the beginning of the mass market of computer gaming
- Directions for the future

The History of Women in Computer Gaming

Early Pioneers

To the public, computer gaming has historically been the preserve of adolescent boys, old enough to hack into their BBC Micros, but not yet interested in the girls next door. The industry itself has been a major force in developing this stereotype, but a few female insiders have always produced materials that have appealed across the gender divide.

The early to mid eighties was an era of darkened arcades filled with science fiction shooters like Defender (Atari, 1983), Galaxian (Namco, 1983) and Asteroids (Atari, 1980). In this midst, the first female games programmer, Donna Bailey, created Centipede for Atari/Midway in 1980, a title which attracted both boys and girls to the arcades, and not just because it was coloured in pastels. The game encouraged lateral thinking and featured a completely new design.

1980 also welcomed the introduction of a new genre to computer gaming. Roberta Williams and her husband Ken wrote and released Mystery House from their kitchen table and created the graphical adventure story. Roberta is credited with writing the storylines of over 14 adventure games, including the popular King's Quest series, which ushered in the mainstream embrace of "interactive cartoons" and introduced the first female protagonist. Graphical adventures are still exceedingly recognisable today in titles like the Lucas Arts series Escape from Monkey Island (1990) and the longest-running gaming series in the industry's history, the Legend of Zelda (Nintendo, 1987). These titles often boast large female audiences.

The Williams' home-grown operation eventually became the international powerhouse Sierra Online, still in existence today. Their backlog of titles also includes other female-friendly games like the arcade classic Frogger (1983) and the tongue-in-cheek PC adventure Leisure Suit Larry: In the Land of the Lounge Lizards (1987).

The Girl Games Movement

While early home consoles proclaimed computer gaming as interactive entertainment for the whole family, slowly the player demographics skewed towards boys. During the decade between 1985-1995, both Sega's and Nintendo's machines attracted huge audiences, primarily male players under the age of 18. The output of gaming companies was simplistic compared to the dynamic products released today; it wasn't until 1995, with the enormous success of Sony's PlayStation and with an older target audience that developers and publishers renewed their interest in making products that appealed to a broader market.

Patricia Flanagan, co-owner of arcade machine makers American Laser Games and Sheri Graner Ray, established games designer, set up HerInteractive in 1995 to create games that particularly appealed to girls. The pair self-published adventure title McKenzie & Co. for the teenage and pre-teen female market and shifted a very respectable 80,000 units. Their relative success in an era when 100,000 units was a best-seller was subsequently dwarfed later that year by the release of one of the most successful titles of that decade: Mattell's Barbie Fashion Designer (1997).

The interactive version of the doll, her friends and her family sold 600,000 copies in the US alone in its first year, proving there was a huge opportunity to sell interactive titles to girls and women. Subsequently, Barbie Fashion Designer became a benchmark for titles across the gaming spectrum, and particularly for the new brand of "pink games" which flooded the market. Out of this gold rush came a number of innovative female-centred and female-owned companies

like Purple Moon Interactive, headed by industry luminary Brenda Laurel. Laurel's most successful games, including those in the Rockett (1998) series, were some of the top titles to be released in the late 1990's. Their teen magazine-style plots focused on conflicts and resolutions set in contemporary and familiar environments. Rockett and others appealed to the girl gamer, and as she grew older they paved the way for titles attractive to the modern woman. Contemporary girl games companies, like the now-veteran HerInteractive, still produce console and PC software based upon this premise, and, particularly in the US, a teenage female market is blooming. (see appendix: HerInteractive: A Decade of Games for Girls)

I am passionate about the potential of inspiring girls through games.

Megan Gaiser, President & CEO HerInteractive

Other companies are exploiting the potential of the internet. The latest trend is to incorporate successful aspects of girl games of the late 1990's and put them in a social setting, where girls and women can develop networks, socialise and play together. (see appendix: Contemporary Girls Games Get Bitchy)

I'm interested in making games that are more wide-open with possibilities of play that appeal to everyone.

Naomi Clark, Producer, Sissyfight 2000

Contemporary Gaming and the Modern Woman

As games-savvy girls of the 1990's grew into game-savvy adults, they demanded different titles, and the industry responded by releasing a slew of successful "nurturing" games like Creatures (Creature Labs, 1996) and The Sims (Maxis/EA, 1999). Massively Multiplayer Online Role Playing Games (MMRPGs) like EverQuest (SOE, 1999) and There.com (There Inc., 2003) also support enthusiastic female majorities of up to 60%, most of whom are over the age of 30. Many of these titles are viewed as opportunities to examine what draws women to interactive entertainment in order to actively develop for this market.

There's also a loud but proud subculture of women who beat the boys at their own games, including all-girl professional first person shooter teams who take on all comers in titles like Quake (id Software, 1996) and Counter Strike (Sierra Entertainment, 2000). On the opposite end of the spectrum, women are the number one players of mobile games (Yankee Group, 2004) and online simple-format games like Bejewelled and Mah Jong (BBC, 2004).

In the decade since Barbie Fashion Designer's release, when the vast majority of titles fell into the categories of shooter and sports simulation, publishers have become aware of the vast array of play styles available and attractive to women over the age of 18.

As a result, games developers are beginning to explore methods of making titles more accessible to girls and women. Plots have developed added depth, self-expression in the games abounds and opportunities for tapping in to the natural social nature of women have been introduced. Controllers and other input devices have become more user-friendly. Dance mats, conga drums and maracas have all been successfully integrated into games for the “party” market appealing to players of both sexes from age 7 to 70. Women are gaming more than ever before, bringing their unique vision to interactive entertainment.

Furthermore, games industry insiders are celebrating female contributions to their products. In August 2004, the first Interactive British Academy of Film and Television Award (BAFTA) for outstanding New Talent was proffered to Paulina Bozek, the producer of SCEE’s SingStar (2004). Bozek received the recognition for her creative and innovative role in the realisation of a title which continues to see sales skyrocket to non-traditional audiences.

The contemporary industry is excited about contributions of its female employees, and recognises their integral involvement in modern computer gaming. (See appendix: Success Story: EyeToy and SingStar)

Females bring different ideas and a fresh perspective to the table, which could be especially useful when trying to appeal to the ‘non-traditional’ gamer.

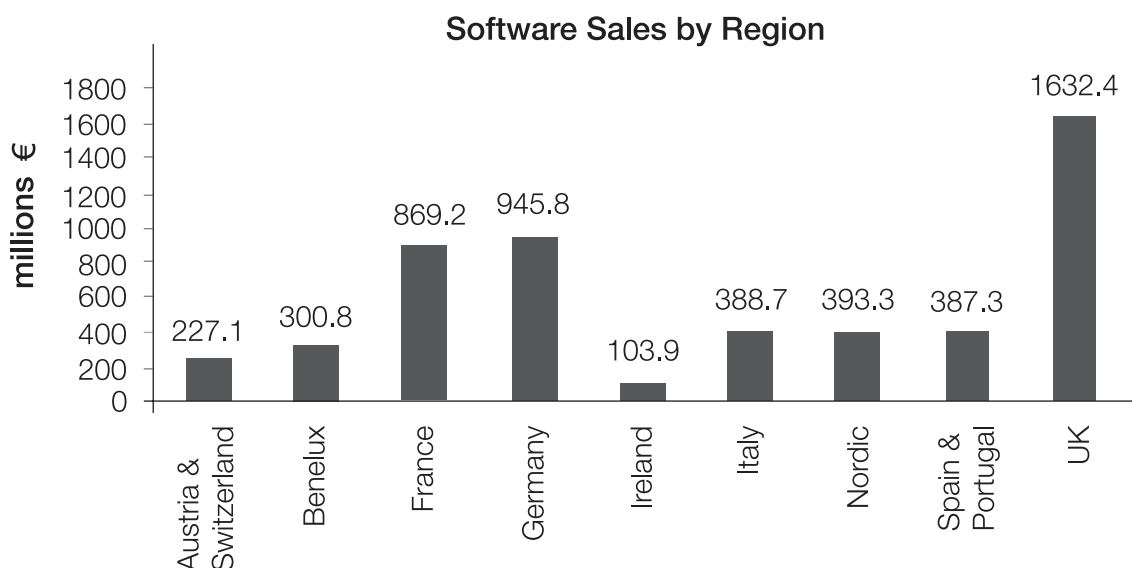
Charu Gupta, Programmer, SingStar

Demographics: The Consumer

The UK Market

According to Screen Digest's ISFE 2003 yearbook (2004), the Western European software market was worth €5.3 billion of the worldwide €15.3 billion in 2003. This positions it as the second most profitable games consuming region in the world after the US, overtaking Japan for the first time since the beginning of the industry. More than 170 million games across all platforms were sold in Western Europe in 2003, primarily to console owners who bought 89.4 million PlayStation, PlayStation 2, GameCube and Xbox titles.

The UK alone purchased €1.6 billion worth of software for its combined 7.3 million current generation consoles (PlayStation 2, Xbox, GameCube), its 7m PlayStations, its 9.2m handheld consoles and its 13m PCs, dwarfing the sales of other countries. Germany and France were the second and third highest grossers for 2003, with software market values of €945.8m and €869.2m respectively.



Source: ISFE

The top selling game of 2003, Grand Theft Auto: Vice City (Rockstar, 2003) , earned €50m in the UK alone for Scottish developers RockStar North, making it the third-highest grossing product in the media market, including the top sellers of Cinema, Video/DVD and Music in that year.

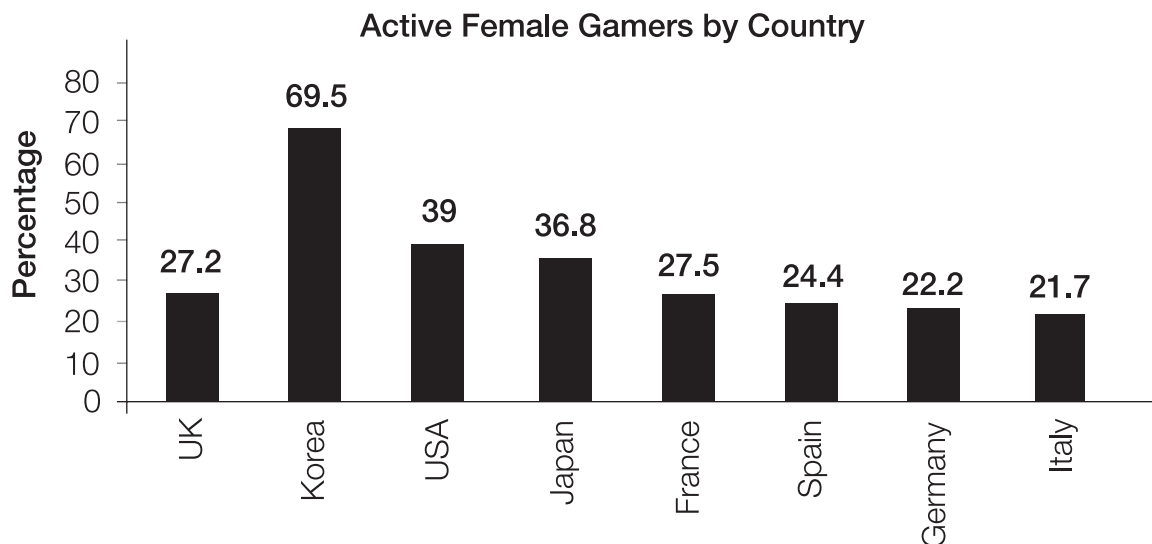
Individual Product Comparisons - UK 2003

Sector	Best-Selling Titles	Units Sold	Gross Revenues
Cinema	Finding Nemo	8.4m	54m
Video/DVD	LOTR-Two Towers	3.8m	101m
Music	Dido-Life for Rent	1.2m	21m
Games	Grand Theft Auto: Vice City	1m	50m

Source: ISFE

The International Female Consumer Market

According to Screen Digest's ISFE 2003 yearbook (2004), across Western Europe female gamers make up 25.1% of the region's total active gamers.



Source: ISFE, KGDI, CESA, ESA

Internationally, British women play less than games-dedicated countries like the US, Japan and Korea where 39%, 36.8% and an astounding 65.9% play respectively. In the US, the steep percentage of female gamers in this market is reflective of the 70 million women with PCs and internet access in their homes (Consumer Electronics Association, 2004). 53% of PC titles are purchased by women, and the computer games charts of 2003 reflect this, with half of the top ten sellers being part of the female-friendly Sims franchise (ESA, 2004). Furthermore, 41% of women report having an electronic gaming system in their household, and while they may not be the primary users of this technology, anecdotal evidence suggests that game helplines see a spike in the number of phone calls from adult women during school hours.

77.8% of Japan's general public and 69.2% of women have at least one games machine in their home (CESA, 2003). The country also has a heavily installed user-base of mobile phone gamers, partly in relation to their well-established networks and low-price data tariffs, where 8.7 million users downloaded and played titles from a vast catalogue in 2003. Further, Japan's online games revenues continue to grow, with 3.43 million subscribers across the available games, and while less than 1% of the female general public currently play them, 25% intend to try them (CESA, 2004).

Similarly, in Korea, the online games market lays claim to a base of 50.6% of the population (KGDI, 2004). (see appendix: Current Status and Outlook for Korean Games Users)

I think girls fundamentally play in a different way, and therefore enjoy a completely different type of gameplay.

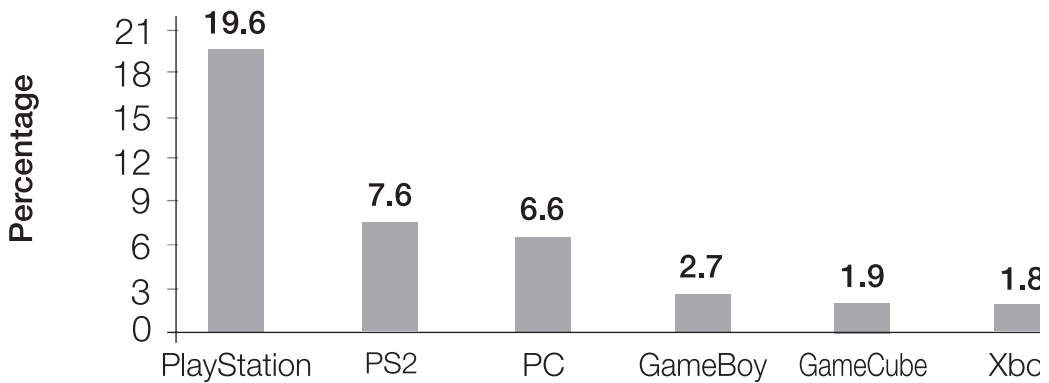
Camilla Lyngbo Hjort, Director and Administrator, Pink Floor Interactive

One title alone, NCSOFT's Lineage (2001), boasts 4 million players (Castronova, 2002) – larger than the number of television viewers – and culturally both sexes are encouraged to play by the availability of machines in public places. Further, other online titles based in that region like Gravity Interactive's Ragnarok Online (2002) actively encouraged female players from the outset. Anecdotally, the gender balance was reset when boys became aware that the population was 80/20 female.

The UK Female Gamer

The average age of British female gamers is 30-35 years old. They represent 27.2% of UK gamers, the second-largest group in the PAL region, succeeded only by the UK male. On average they spend 7.2 hours per week playing games, particularly on the PlayStation 1, the PlayStation 2 and the PC.

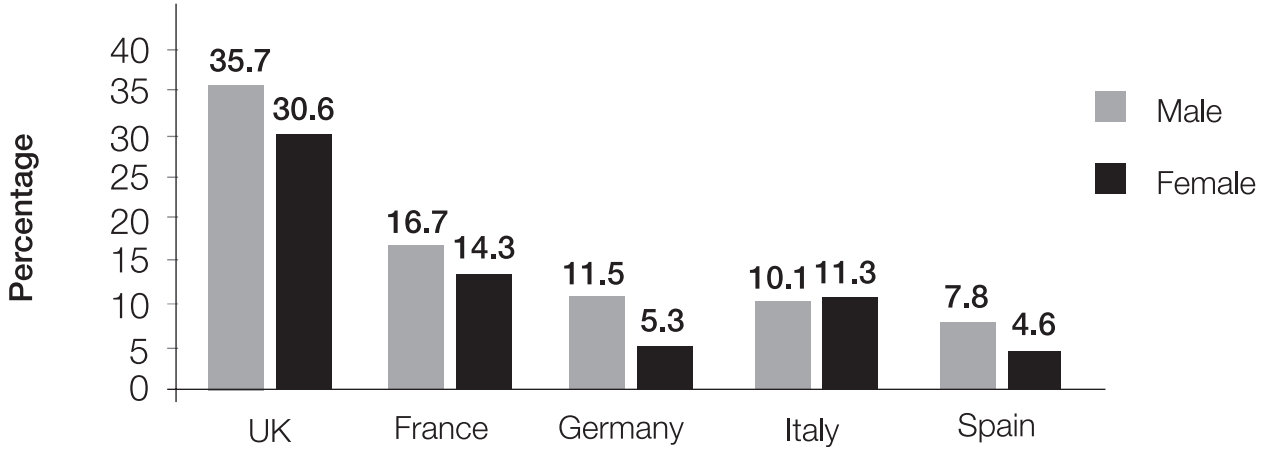
UK Female Gamer Preferred Console



Source: ELSPA GameVision 2003

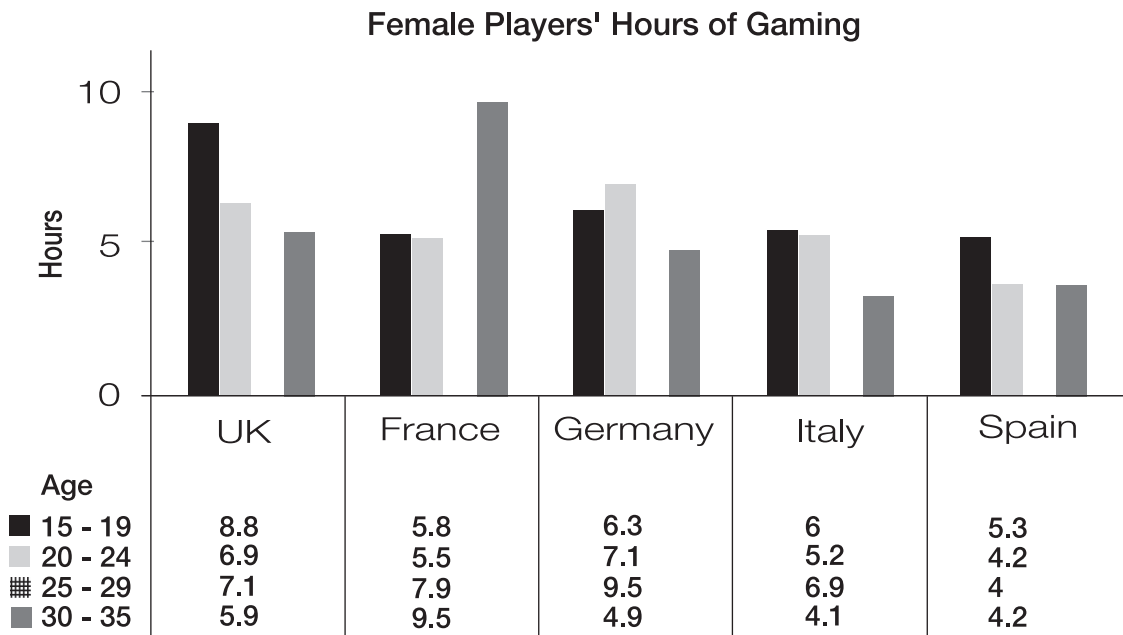
The UK's adult female gamers spend the most money on gaming appliances and software of any other PAL-region women, more than €250 per year (GameVision, 2003). Again, they come second only in spending across Europe to the UK men.

Major Spenders by Country (spend over €225)



Source: ELSPA GameVision 2003

While a greater number of 30-35 year olds play games, the younger generations spend more time on their interactive entertainment, primarily because they can. Work and other aspects of contemporary life impinge upon the number of hours the older gamer can spend, and this has an impact on the types of games she plays.



Source: ELSPA GameVision 2003

According to the UK Time Use Survey 2000, British women spend 1 hour 30 minutes more per day doing general housework than men, including an extra 40 minutes on the cooking and washing up. This leaves less time for socialising and personal care, two activities British women engage in more than any other. In contrast men use their time for sport and hobbies (Office for National Statistics, 2000), and they report spending an average of 10.78 hours per week gaming (GameVision, 2003). Development companies are aware of this discrepancy, both in terms of time and chosen leisure pursuit, and some contemporary games offer flexibility in both commitment and activity.

Women's gaming choices reflect their time limitations; they like titles like Tetris (Atari, 1988), The Sims (Maxis/EA, 2000) and Gran Turismo (SCEI, 1997), but not time-hungry behemoths like Shenmue (Sega, 1999) or highly-skilled, fast-action games like Half Life: Counter Strike (Sierra, 2000; GameVision 2003). Many of their preferred games are easy to master and don't require a great amount of negotiation with a controller. The female gamer can, literally, pick up and play. Similarly, there's no demand for dedication. Their ideal titles are "interstitial", as Sims-creator Will Wright explains. Participants can have a good gaming experience regardless of how much or how little time they put in.

An area of the games market which has benefited from exploiting the female style is the online casual games market. Titles like Bejeweled, Patience and Find-a-Word, found at sites like Chickstop.com, Yahoo Games and others, are quick-fire and low-commitment. Players can log on and log off at their discretion, when they have the chance or need a break. Recent market research indicates that women between 35-49 (Nielsen-Netratings, 2004) spend more time on online games than any other demographic.

This population is one of the least considered, yet they are the most dedicated and have the biggest budgets to spend on technology; they will play single-player and multi-player puzzle-based titles for an average of 2.5 hours per week, often on subscription rates.

(see sidebox, Online Games Attract a Broad Demographic)

Women are the controllers of household budgets, making almost all of the decisions regarding domestic product expenditure.

Suzie Cardwell, Director, 3RD Sense

Women's game choices also reflect their proclivity to use technology in order to learn new skills or about themselves. For girls, play has always involved an element of practice for a future life of domesticity. According to Henry Jenkins (1998), girls' toys consistently have an explicit aspect of exploration as learning, instead of exploration for the sake of it, which more often reflects boys' toys.

Many of the games that have been released since the early days of the industry are punishingly goal-oriented, emphasising supremacy over the environment, in harsh colours, to repetitive music and consistent with boy-centred themes. Girls have gravitated away from these products allowing boys to dominate the home machines and the arcade boxes. Studies suggest female gamers traditionally adopt software that encourages self-reflection, social interaction and proficiency.

The results of in-depth interviews with 20 women who play games indicate that favourite titles include role playing games like the Final Fantasy series (Square Enix, 1987), narrative adventures like Legend of Zelda (Nintendo, 1987), easy-to-pick up driving simulations like Colin McRae Rally (Codemasters, 1998), puzzle-adventures like Prince of Persia: Sands of Time (UbiSoft, 2003), quick-fire arcade puzzlers like Tetris (Atari, 1988) and life simulations like The Sims (EA/Maxis, 2000).

Those who reported that they particularly enjoyed action titles like Halo; Combat Evolved (Microsoft, 2002) suggested similar reasons for their satisfaction with the game as those who preferred non-action titles.

The presence of a good plot, rich characterisations, choice in how they pursue goals, freedom of self-expression, novelty in challenges, immersion in atmospheric virtual environments, pick-up-and-play capabilities and flexibility.

Women also indicate that identifying with a character is important

Online Games Attract a Broad Demographic

A grossly overlooked source of female gaming revenue is the online games market, worth an estimated £270m in 2003 (BBC, 2004), a figure attractive to advertisers and viral marketers. Women make up 62% of players on some of these puzzle, card and trivia-based portals, many between the ages of 35-49, and are often willing to pay for them on a per-game or subscription basis.

"This is important from a commercial perspective, as women in this demographic are the controllers of household budgets, making almost all of the decisions regarding domestic product expenditure," explains Suzie Cardwell, Director of 3RD Sense Ltd. "As a result, they are a highly sought after audience for advertisers. The commercial opportunities that arise as a consequence [of women playing these games] are obvious."

Indeed, these quick puzzle fixes are a cheap alternative to the big budgets and spiralling development times of traditional console and PC titles; not only are they more attractive to non-traditional gamers, but an online game of this type can be developed in three weeks, licensed to one or two sites and earn £15K per year. Websites are eager to develop a range of titles, which attract up to 5.4m visits per month. A recent Nielsen poll found that the online games sites are among the stickiest, with an average stay-time of 20-40 minutes.

Cardwell suggests that the design is an important aspect of why women play these games, and why they come back for more: "These games provide

to their enjoyment of a game. Arguably, as more women have been vocal about their game playing, there has been an increase in strong female protagonists.

However, the presence of so many contemporary titles in this list suggests that modern designers are increasingly incorporating gender-inclusive aspects in their game designs, and that women are eager to respond. (see sidebox: "But what if the player is female?")

Technological advancements over the past decade have offered developers the computer capabilities necessary to create software that features a variety of game styles within one title, both online and off. This "genre convergence" offers both genders something to enjoy within the same gaming experience, and the broadening demographic indicates that they are succeeding.

The Social Life of Computer Gaming

Hardware manufacturers are also keen to incorporate internet interactivity into their games-dedicated machines, and both male and female audiences have responded to the broadband connections offered by Microsoft's Xbox and Sony's PlayStation 2 by signing up to their services in the hundreds of thousands.

While current applications that feature online capabilities primarily only offer players quick-fire challenges through racing games and team-multiplayer interaction, future releases will inspire greater social interactivity between remote consoles. The most explicit is the forthcoming EyeToy Chat, which utilises the Sony webcam.

More advanced social interaction is taking place in PC-based Massively Multiplayer Online Games (MMOGs), in which hundreds of thousands of people converge in internet-based, three-dimensional, goal-oriented spaces.

Research suggests that the gameplay within these virtual worlds is enhanced because players use them as traditional games as well as arenas in which to explore new relationships, new places and themselves. Titles like EverQuest (SOE, 1999), Second Life (Linden Lab, 2003), City of Heroes (NCSOFT, 2004) and The Sims Online (EA/Maxis, 2002) encourage group participation, flexibility and mastery, resulting in significant friendships and personal empowerment.

Television-based consoles and mobile phones are expected to support these pervasive worlds in their next generation releases, and research suggests that the genre's worldwide worth will reach €3.51bn by 2005.

The games' uptake by female players indicates that they are excellent examples of titles which appeal equally to both sexes, and

quick distraction and are easy to learn. The objectives and the actions required to reach those objectives are immersive, making the game compulsive. Controls are easy to use – mouse clicks or simple key combinations."

The opportunity to compete and win prizes is also a draw, as are the communities which grow out of the websites. "In my opinion," explains Cardwell, "the importance of this community based content can't be underestimated on a site such as Chickstop.com. Women's tendency to seek social contact with other like-minded women finds an outlet in the forum that cannot easily be found on other sites."

These online games are often dismissed by traditional developers, but are attracting women gamers nonetheless, suggesting that there is a large untapped market which offline designers can learn from. "The capacity for the development of depth offered by the PC/console technology could take these popular online games into a new realm and attract the online user," comments Cardwell. And with it could come the financial opportunities. As Cardwell offers, "The sky's the limit."

some of the titles which particularly attract a broad demographic are notable for their ratio of women to men designers. (see appendix: The Sims Online)

Reflective of reported reasons why each gender approaches the internet, men for entertainment and leisure, women for educational pursuits and interpersonal communication (Weiser, 2000), MMOGs offer a variety of play styles and avenues for self-expression.

They can be as goal-oriented or as casual as players desire, and many women report that the opportunity to create an in-game experience that is unique and individual is a primary appeal (Krotoski, 2004).

Taylor (2003) also suggests women are drawn to this genre because they enjoy gaming within social communities which encourage exploration of an environment with others as a team, allow for the opportunity to play out different aspects of self-identity in a safe setting, and support the pleasure associated with success.

Economics

Economics is another important factor in the game life of UK women. There is a well-documented disparity in pay between the sexes and while the Home Office suggests that in 2003-2004 this gender gap had continued decreasing, historically women's reduced income has an affect on how they play.

Women are much more cautious than men when it comes to purchasing software and hardware, playing primarily on last-generation consoles and with games that are purchased from the budget price range. Like with other technologies, they also rely upon recommendation by a trusted friend or recognition, particularly when the title is associated with another IP, like the Harry Potter franchise (GameVision, 2003; Consumer Electronics Association, 2004).

Women's exposure to gaming media also influences what they buy. This demographic isn't as readily exposed to software or hardware products as men because advertising tends to be in male-dominated avenues. However, some manufacturers are bucking the trend and results are encouraging. (see appendix: Advertising and its Malcontents)

Another trend of interest to the games community is that a series of recent reports by the US-based Consumer Electronics Association (Consumer Electronics Association, 2004) and others indicates that female consumers are currently the primary purchasers of technology for themselves, for the home and for the family.

But what if the player is female?

Sheri Graner Ray is the author of *Gender-Inclusive Game Design* (2003). She has over 15 years of design experience, and has spent much of that time actively challenging the default perception that all gamers are male. She readily admits that she is well known for throwing spanners in the works of design meetings by asking her trademark question, "But what if the player is female?"

She encourages designers and developers to learn the play styles of women, and while she doesn't argue for "DOOM in a pink box", she highlights the need to understand the differences between the sexes. For example, many current titles punish in-game failure through the irretrievable loss of life, skill or character.

Graner Ray suggests that female players stop playing when confronted by such punishment, and don't return. She indicates that a better alternative to in-game failure is to delay progress, or offer the retrievable loss of items or skills. While the former would result in marginalizing an important audience, the latter would encourage them to stay.

Graner Ray indicates that such subtle differences are worth consideration in the brainstorming meetings of games companies. She also argues that simply thinking about the potential female audience for a title may have an impact on the default decisions made by creatives, encouraging a broader range of choice and flexibility that will appeal to both genders.

Games companies have responded and are involved in designing their hardware in such a way to appeal to contemporary men and women, as mobile phone, palmtop console, laptop computer, CD and DVD player, television and hi-fi manufacturers have done.

The forthcoming Sony PSX home entertainment machine and the Sony PSP and Nintendo DS handheld systems all feature sleek, desirable designs, reflective of women's preferences for simplicity, style and portability (Consumer Electronics Association, 2004).

I think girls fundamentally play in a different way, and therefore enjoy a completely different type of gameplay.

Camilla Lyngbo Hjort, Director and Administrator, Pink Floor Interactive

Demographics: The Industry

Uppity Women in Computers



Without fanfare, women have been involved with the development of computing technology, from Ada Lovelace, the developer of the first computer program and Grace Hopper, inventor of the first program compiler. They continue to silently contribute to the development of Information and Communication Technologies (ICT), including the development of the basic building blocks of the ubiquitous Windows Operating System.

According to the Strategies of Inclusion: Gender in the Information Society (SIGIS) research group, a similar proportion of boys and girls study ICT-related subjects in the UK, but few girls graduate with qualifications or pursue employment in these fields.

SIGIS suggests that computer entertainment or play may be more important than previously acknowledged in the uptake of women's use of IT in general. This has significant implications for the role of computer gaming in the balancing of the workplace, particularly in light of our society's increased occupational reliance upon computer technologies (Sorensen, 2004).

Further, a British Home Office five year research study has suggested that players of computer and video games are more likely to be academically successful, to go to University and to have better employment prospects (Harris, 2001).

Turning Men On, and Women Off: The Helpless Female

Though Roberta Williams introduced the first female protagonist in 1987, gaming history has been peppered with often un-complimentary images of women. This run down offers highlights of the three primary categories of characterisations that have dominated the gaming medium since its genesis.

In the beginning, there was the helpless female: the princess kidnapped by the gorilla, hidden away in another castle, and other varieties of damsel in distress. Donkey Kong's Princess (Nintendo, 1981) has never been much of a role model for ladies however she represents a large part of the history of women in computer games. Whether it's the plumber Mario (Atari, 1983) or the butch Duke Nukem (GT Interactive, 1997), the goal is to save the girl and save the day.

This is not an unusual concept in entertainment media. Movies, books, theatre and music all promote the knight in shining armour archetype. The problem, though, is in the inability of the female gamer to identify with such a character. The immersion of computer games encourages the player to take on the skin of the protagonist, however, he has traditionally been the man in pursuit of his girl.



The UK Industry

The UK is a global leader in the development of internationally AAA titles, like the Grand Theft Auto series (Rockstar North, Scotland; 1998), the Tomb Raider series (Eidos, England, 1995) and the Colin McRae Rally series (Codemasters, England, 1998). It is also elemental in the creation of recent cross-gender products like SingStar (Sony, 2004) and EyeToy (Sony, 2003). Forward thinking UK development companies like Lionhead have attempted to address some of the female preference issues in the accessible Black & White (2000), and others are dealing with the characterization issues head on, like London-based companies Argonaut (Malice, 2004) and Sony Cambridge (Primal, 2003).

Within Europe, Britain has the highest number of games development studios with approximately 8,000 employees out of the European total of 13,250 (ISFE, 2004). The UK also tops the number of mobile phone games development studios (20) and TV games development studios (3; ISFE, 2004). However, of the UK employees, only 16% are women (SkillSet, 2002). While this figure is certainly worrying, it is not unusual in any of the creative sectors. Indeed, SkillSet's Workforce Survey 2003 reports that women make up a proportionately smaller population across the audio visual industries than the UK workforce in general.

In response to the steady uptake of computerized entertainment by female players, games companies are increasingly taking notes from the European mobile phone industry, which has had to adapt very quickly to the increase in the female demographic of its user population. Instead of remaining staunchly technocentric, telecommunications organizations are actively employing women in order to give their products "female" elements (Sorensen, 2004).

Computer games are the 6th largest media industry in the UK according to the 2002 Skillset report, yet the women who work in interactive entertainment are the smallest minority across the entirety of the audio-visual trade. Further, according to research conducted for this White Paper with a selection of 14 ELSPA members across the games industry business spectrum, although the industry offers the 6th highest pay packet within AV, with an average salary of £30,291, women earn less than men, with an average discrepancy of £7,126.

Women tend to approach employment in gaming from an animation (41%) or art and design (12%) background (SkillSet, 2003). The high crossover between these industries and games suggests that female employees are highly skilled. Indeed, Skillset (2003) data indicates that 69% of games employees are graduates, primarily with undergraduate degrees other than gaming.

Employees of both genders often find their first job in games through advertisements. According to the current research, 42.9%

Turning Men On, and Women Off: Sex Kittens

Sexual activity in games is aimed at the male audience, and sexual jokes and innuendos turn women off playing them (Graner Ray, 2003). Titles like Sam Fox Strip Poker (Martech, 1986) and the pornography business simulation Lula: The Sexy Empire (Take Two Interactive, 1998) are explicitly niche, and the industry doesn't expect that the female demographic will engage with them. However, mainstream computer game entertainment has often featured a vast array of voluptuous characters and situations which further solidify the pastime as heterosexual and male-oriented.

Graner Ray (2003) indicates that although there is an element of fantasy that exists for both genders, male avatars do not display the overt cues of heightened sexual arousal, like erect nipples, parted, full lips and other displays of fertility. Further, even in the most popular games like the Grand Theft Auto series (Rockstar, 1998), women are often represented as sexual stereotypes.

This hyper-sexualisation and objectification affects women's gameplay in other ways. Dr. Kathryn Wright, columnist with WomenGamers.com ran an informal study with men who gender-bend, or take on female characters in online games, and discovered the biggest drawback of playing them were the insults and propositions (Wright, 2001).

of UK companies report that they advertise in specialist magazines and 64.3% recruit through specialist agencies. If women are not involved with these organizations or are not purchasing these publications, they are unlikely to know that the jobs exist.

Leading UK games recruitment agency Aardvark Swift reports that of the 413 people they placed in 2002-2003, 375 were men and 38 were women. By job role, their figures break down as follows:

Job/Role	Men	Women
Art and Design*	161 (91%)	17 (9%)
Programmers	103 (98%)	2 (2%)
Senior Management	62 (95%)	3 (5%)
Sales/Marketing/PR	49 (64%)	16 (26%)

* in 2002, 11% of the artists placed were female, while in 2003 8% of artists were female

Source: Aardvark Swift

The disparity in these levels of participation may be a result of ignorance in the types of jobs that are available within the games industry. However, only 14.3% of companies approach institutions like schools, colleges and universities to encourage a broader demographic to apply (14.3%).

According to the White Paper survey, female UK games professionals earn £374 less at starting salary and progress more slowly through the company ranks, averaging a promotion every 19.5 months. Both sexes remain in the industry for approximately three years, with men averaging three months longer than women. Only 0.4% of female employees in the UK are in Lead, Director or Management positions, while 1.2% of male employees hold these jobs. Those women who are in lead positions are eager for others to join them, in order for the industry's creative aspects to be bolstered by a wider frame of reference for future products (see box: Working in the Industry).

Games companies are eager to recruit women to their ranks however and certainly the increase of numbers of women enrolling in computer games university courses offers hope of qualified female applicants sending CVs to recruitment agencies and companies. (see appendix: Getting In)

A large number of women who work in the games industry are highly creative, idealistic, and gamers themselves.

Mary Margaret Walker, Co-founder & CEO, Mary-Margaret.com

Turning Men On, and Women Off: Girl Power

While existing female gamers overlook the damsel in distress and hyper-sexualised stereotypes by ignoring or reconstructing the images to suit their gaming purposes and needs (Yates & Littleton, 1999), non-gaming females are unlikely to rationalize the visuals in favour of gameplay. The contemporary trend, then, has been to incorporate "normal" women into protagonist roles.

Lara Croft's proportions may be renowned for their unfathomable dimensions, yet she is a character with whom many women engage. Similarly, Joanna Dark from Perfect Dark (Nintendo, 2000) and Jen from Primal (SCEE, 2003) are both strong women who can handle an altercation and an automatic weapon with style and panache.

Metroid's Samus (Nintendo, 1986) is also an excellent example of a character with whom many women identify. Unusually for the genre she is almost genderless which allows the player to project her own vision and assets onto the heroine. American McGee's Alice (EA, 2000) and the lead character in Argonaut's Malice (2004) are also female protagonists who demonstrate ability without physical turn-offs. Some designers believe that the more female characters there are that are presented in this non-sexual way, the greater the number of women who will play.

Community

Research has indicated that an important aspect of the sense of involvement in any leisured female activity is a community of similar-minded women with whom to share experiences and form new ones (Sorensen, 2004). Female-centred spaces have been used tactically to encourage women to become involved with technology in the past, and there is a growing body of such organisations available to female players and industry personnel.

Websites offer environments for women to communicate about computer gaming culture from their perspective, as well as to meet other women for online gaming.

Online gameplay can be a lot different than, say, sitting down and playing football or Zelda. The virtual world and role playing that can exist in online games is more inviting to explore.

Jessica Lewis, Producer, The Sims Online

For women interested in entering the technological sector in videogame production, there are a number of international and UK-based resources aimed at networking and outreach opportunities. Many hold regular meetings throughout the UK, like Digital Eve UK, the British chapter of the international women in technology networking organisation, and the UK section of the International Games Developers Association. Other are purely web-based, like the IGDA-sponsored Women in Games Development Committee which serves as a meeting place and discussion group for over 350 members around the world, and offers contacts, industry guides and resources from their website at www.igda.com/women.

There are few annual events specifically focused on women in gaming, however, notable ones include the Women in Games Conference (www.womeningames.com) held in the UK every June, the GameGirl Initiative, run by Wired Sussex at the University of Sussex in Brighton, which encourages women to get involved with games development first hand through their annual competition, and the Women in Games Conference (www.womengamesconference.com) in Austin, Texas every September.

Many companies would like to hire more women in order to create more gender-balanced games and also to have a more balanced working environment.

Vicky Cairns, Consultant, Aardvark Swift

Future Research and Conclusions

The financial prospects of the worldwide computer games industry look excellent, and the roles women are playing, both as consumers and creators, are encouraging the establishment of a mass market phenomenon. This report highlighted the historical and pioneering presence of women in computer gaming as a precursor to the current boom of female players.

Most heartening in this trend is the uptake of gaming by adult women. It heralds an exciting revolution in the design of interactive leisure and the consideration of women's needs in this domain – from activity to characterisation. Increasingly women are turning to interactive entertainment for social interaction, learning and leisure. They, in turn, are encouraging their younger counterparts to continue exploring virtual dimensions, try on virtual skins, and solve real-world challenges in virtual space beyond adolescent boundaries.

The greater depth of story and character demanded by girl gamers is increasingly feasible as entertainment technology continues to advance, offering greater hardware memory and faster processing speeds. Encouragingly, the gap between titles that appeal to both women and men is diminishing, and both categories of gamers are now exposed to a wider variety of gameplay options, experiences and avenues. This has a beneficial impact upon the creativity of the games development community, whose products are increasingly winning battles for popularity against other traditional forms of media, and are finding their ways into previously-unlikely cultural avenues, including garnering accolades for design and innovation.

The convergence of multiple forms of media, from the internet to mobile phone technology is also attracting women to gaming, resulting in positive experiences with interactive entertainment, thus driving them to explore alternative options for electronic pastimes. The products that greet them in their pursuits are encouraging them to stay and play.

Furthermore, by including more women in the design process of games, the titles that are being released onto the market are more diverse, attract a wider audience and offer undiscovered kinds of participation. The industry recognises the contributions made by its female employees and happily encourages them to become involved in the innovative, imaginative and exciting realm of game development. Women in the industry are encouraged to reach out to girls and other women and talk about their experiences in one of the fastest growing and most creative industries in the world today. Diversity in gaming can only be positive, for everyone.

A good game is a good game - if you like that type of game, like the subject matter, and the game is well-executed then you're probably going to like the game no matter what sex you are.

Katie Lea, Lead Designer, Sony Cambridge

APPENDICES

HerInteractive: A Decade of Games for Girls

Megan Gaiser is the President and CEO of HerInteractive, the legendary games publisher whose first title McKenzie & Co. ushered in the girls' games movement. Since that time, they have published a wide range of titles for the 11+ age bracket, including the popular Nancy Drew adventure series.

Why did you decide to go for the girl games market?

When I started at HerInteractive, I did not realize that the game industry did not believe in the market for girls or women. Companies market films, books and music to girls. Why stop at computer games? Erasing this strange blind spot quickly grew into my personal mission. I also was very excited about the potential to transform Nancy Drew books into interactive mystery games. Nancy Drew represents all those characteristics we aspire to. She's smart and gutsy and I am passionate about the potential of inspiring girls through games.

Why do you feel it's important for girls to get involved with technology?

To insure that technological and creative innovations incorporate the perspectives of both men and women, and that both the industry and the products are inclusive rather than exclusive.

Also to give girls equal opportunity in their future career paths. In 1998, studies showed that girls were drifting away from the computer at age 10. This was the age where boys were expanding their computer skills, largely due to all the video games designed for them. If you fast forward to when these kids are 21, the boys will have the earning advantage over the girls due, in part, to their early exposure to technology.

What do you feel you need to consider when making games for girls?

There needs to be as many types of entertainment as there are preferences. The industry has far to go to create more choices for both girls and boys. At HerInteractive, we set out to make great games, not girly games. Our target audience was female. Based on our research, we found that most girls and women were bored by repetitive violence, did not like gratuitous violence, and they did not enjoy being portrayed as trophies or victims of violence. As a result, our games may include implied violence (i.e., someone who has disappeared under suspicious circumstances) and there is always a reason for it. But aside from that, we found far more similarities between girls and boys than differences.

Why have the games produced by HerInteractive been such a success?

I think it's a combination of creating great games and ensuring we preserve the brand integrity in the process. We also work with our advisory board of girls and women during game development to help us keep in tune with our customers' preferences.

What do you feel needs to change before more women become involved in the games industry?

Women are already changing the industry by their participation in every aspect of gaming from game design to upper management. Their contributions are starting to show; there are more choices in genre and theme; more strong female characters; and plot, dialogue and character development are beginning to get equal time with action. These changes will attract more women and girls to gaming, and increase their interest in it as a career choice. The more women get involved, the more they will inspire girls and women alike to make contributions to the gaming industry.

Contemporary Girls Games Get Bitchy

Two contemporary girl games have taken the playground antics of teenage social struggles and imported them, warts and all, to the internet for roaring success across a broad demographic. Sissyfight 2000 (Lego Virtual/gameLab, 2000) and PowerBabe (Pink Floor Interactive, 2003) both emphasise negotiation, conflict resolution and manipulation in order to be the most popular girl in the school, and - just like in the playground - there are no holds barred.

Naomi Clark, Producer, Sissyfight 2000

"I love thinking about ways to expose games and certain forms of play to people who don't normally get into them"

Naomi Clark was an avid gamer before she produced Sissyfight 2000 (Lego Virtual/gameLab, 2000). She lived for a short time in Japan, where she developed a taste for violent Japanese films and solidified her love for computer games.

Why did you decide to go for the girl games market?

Strangely, even though we were making a game called "Sissyfight 2000" that revolves around girls tormenting each other in a playground, we didn't really think about the girl games market in particular. Like a lot of neophyte game developers, we were mostly making the game for ourselves and people like us, with weird senses of humour.

We knew that we didn't want to make anything resembling a typical game, that we had the opportunity to get away from that, and that it would appeal to audiences that usually get ignored by the game industry.

Why do you feel it's important for girls to get involved with technology?

Technology is mostly how human beings control the world around us, for better or worse, and I don't think the design and application of that control should be handled only by one type of person. It's obvious to me that women can design and handle technology just as easily as men can; it's just a matter of continuing the process of breaking down walls of stereotypes and exclusion so that boys and girls can all feel comfortable dabbling with all kinds of technology and creativity.

I think that girls and women (not to mention boys and men who feel excluded from the marketing cycle) do need different kinds of games than what's typically targeted at young males. And that's because it's such a narrowband target - we're in the practice of excluding all sorts of people that don't fit our demographic. I'm interested in making games that are more wide-open with possibilities for play that appeal to everyone.

It's easy to learn and play, it can take as much or as little of your time as you want to devote to it, and it has a very quirky feel to it that tells you right away that it's not a typical game. It's genuinely fun and strategically complex, especially if you include the larger social levels of the game; Sissyfight players love to hang around between games to chat, make friends, and argue. The friendships that form are the real glue that's helped Sissyfight stick around for so long and amuse so many people who aren't typical gamers.

Camilla Lyngbo Hjort, Creator, PowerBabes

“So many games out there are made for boys. I think it’s only fair to make some for girls”

Camilla Lyngbo Hjort is Administrator and Creative Director of Pink Floor Interactive, a girl games company based in Copenhagen, Denmark. Her internet game, PowerBabes, is aimed at teenagers “too young to go out clubbing or have boyfriends”, and boasts registration figures of more than 50% of Denmark’s under-18’s. The game’s ultimate goal is to increase self-esteem by manipulating, negotiating and resolving conflicts in order to become the most popular girl in each round.

Her brand of “BitchGame” is hugely popular in Scandinavia, with a planned PlayStation 2 game, clothing label and novel in the works, and she’s hoping its English language version will be as successful in the UK.

How did you get involved with the games industry?

I have a rather different approach to games than most people in the industry, as I am not a gamer and do not enjoy traditional video games. I have done academic research on girls as a target group and, combined with my own personal creative vision, it is a good background to push the standards of games. Having worked with a lot of different types of media such as TV and creative writing, I use this to add storytelling and emotional elements to games.

Why did you decide to go for the girl games market?

Lots of other products are targeted at men OR women, so it would be ridiculous to assume that the fact that games are made especially for girls would reinforce stereotypes. And as for characters and values in the games I do, we turn the whole thing upside down so that girls are in control.

My point is never to copy traditional types of gameplay, because I think girls fundamentally play in a different way, and therefore enjoy a completely different type of gameplay - based on their own life, based on social logic, based on communication and roleplay.

Why is PowerBabes such a success?

I think it works because it hits spot-on what 13-14 year old girls feel is important, and nobody else has provided this in an entertaining interactive environment. As a multiplayer game it is never the same and as a player you don’t get bored with it. And the tone of voice is fun in an edgy/bitchy way and the designs are cool!

Success Story: EyeToy and SingStar

Between May 2003 and May 2004, the UK-developed EyeToy (Sony, 2003) sold more than 3.5 million cameras internationally, 30% of which were to new PlayStation 2 players (Waters, 2004). The camera offers a controller-free gaming experience to veteran players and new recruits, allowing both populations a unique pick-up-and-play experience which has been adapted to a variety of games and will soon be an integral aspect of the Q4 2004 release EyeToy Chat.

In May 2004 Sony Europe released SingStar, and the success appears to have been repeated. The game, which is voice-controlled through microphones, was widely covered in mainstream press, and has garnered unprecedented support from women's and girls' magazines. Charu Gupta was on the programming team.

Why do you think SingStar is such a success?

I think SingStar is such a success because we aimed to make a high quality product that was sociable, fun and inclusive. This meant the game also had to be non-intimidating and intuitive to play.

I think having a varied team helped - nearly half the SingStar team are female, including the producer - since we had more balanced, diverse approaches and opinions to investigate. We also found that we had a lot of support from the rest of the studio, which shows that the same game can appeal to both hardcore and casual gamers.

A less obvious way in which I think SingStar is a success is in the interest received from lifestyle press, who are usually indifferent to video games. For example, Heat magazine ran a SingStar competition and the game was amongst the Harpers & Queen top 100 items for 2004 this year.

What do you most enjoy about programming games that are accessible to women?

Our primary aim was to make something fun to play, which had a refreshing graphical style. I felt closer to the project because I could imagine my friends and family playing it, as well as my colleagues. Additionally, I could explore topics that I could relate to, such as music genre and song characteristics, rather than wrestling or racing, which I have limited interest in.

How will the games industry benefit from having more women involved with the development of games?

In my opinion, many people within the industry don't agree that not having more women involved is a problem because they don't see the disadvantages with a male dominated industry. Therefore they wonder what all the fuss is about.

From an immediate and selfish point of view, I prefer working in a mixed studio because I find it a more balanced, interesting environment where people become naturally open minded and therefore creative.

Females bring different ideas and a fresh perspective to the table, which could be especially useful when trying to appeal to the 'non-traditional' gamer, just as a 70 year man could have different opinions on what is fun.

The Sims Online

Jessica Lewis, Producer, The Sims Online

Jessica Lewis was the Producer on The Sims Online, a team which featured a 40% female development team. The game and the spin-offs are a huge success with non-traditional audiences, boasting a 60% female player population in both its offline and online iterations. Its contemporary setting has opened the gaming door to a non-traditional audience in a way no title has before. Essentially a “life simulation”, players develop families, get jobs and ensure their little computer people have a roof over their head and food to eat.

How did you get involved in the games industry?

My first job out of school was with an online education company. At the time the head of production had EA games in his background. When that company started laying people off, the head of production left and told me to think about going into games. He told me of this game studio, Maxis, who developed The Sims franchise. He also mentioned a lot of women were at that particular studio; and that my skills and personality would be a great addition. It didn't take me long to jump at the opportunity. It really sounded like fun and a great challenge to be surrounded by cutting edge entertainment. I had played Sim City and Carmen SanDiego in my teens and working for a studio that made The Sims was especially appealing to me and my sociology degree.

Why does The Sims Online in particular attract so many female players?

The Sims Online naturally attracts more women simply because the franchise market itself already boasts around a 53% female player base. TSO is a more casual MMOG PC game. This makes it a lot more inviting to a market that is interested in using their computer as entertainment but not very interested in a perceived hard core game/entertainment. Turns out there were a lot of female players in this market.

Online gameplay can be a lot different than, say, sitting down and playing football or Zelda. The virtual world and role playing that can exist in online games is more inviting to explore, perhaps less of a barrier. In addition there is the social aspect that I believe a lot of women like to “have around” in a game, even if they aren't very social.

I believe women are usually familiar with computers when they come to online games. The existing familiarity to the machine is one less barrier to such games. Personally, I find playing on a console a lot more intimidating, particularly when I was first getting into games. The console controller was so foreign at first! I wanted to play well instantly and the controller made that very difficult.

Did you aim to attract female gamers, and if so, how did you consciously design for them?

There was never a time when we sat in design reviews and said, “Is this going to attract women.” It is more implicit than that. Maxis is one of the few studios that has about 45% female developers. I think simply because more women are involved in the designs and development a different than average kind of contribution happens. Diversity (gender, background, personality, etc) is a good thing when making a mainstream game.

How do you think the industry in general chooses to include women in the play environment?

Some say men have different play styles than women. I think it's best to acknowledge that we all approach games uniquely and gender may or may not play a role in that. I know the designers I work with (both male and female) design for a variety of game styles. Knowing that some people are collectors, some are into killer fighting techniques and others dig very cool magic options in gameplay is key. These considerations should be made for gender; different age groups; and casual or hardcore players alike.

Working in the Industry

Katie Lea, Lead Designer, Sony Cambridge Studio

How did you get involved in the games industry?

I got my break in the games industry through connections with a games company via my boyfriend – he was working late, I was bored so he gave me the level mapping tool for the game he was working on at the time and just left me to play with it. I built a few levels up, he and his boss liked them and I got a short term contract after that and I ended up building about 30 levels for the game. It wasn't too long after that I then got a job with Millennium, who published James Pond.

When I first started there we barely had any other girls in the development teams and even now the percentage of females is still very low (6 out of 80 development employees), so to get into games you do need to be someone who doesn't mind the idea of working in a male dominated environment in the first place!

How do you think working with a mixed-gender team differs from working in a single-gender team?

In my opinion it's in more subtle ways that a woman's influence might adjust the way a project develops. On the design side of things where a man might naturally assume a character is male I might not, so the percentage of female characters can increase – although quite often you'll find that sharing of resources, game memory limits and basic time constraints means that the balance is tipped more on the side of 'default' male characters. Also when it comes to the design of female characters I can have a very beneficial influence at this stage, both visually and personality-wise.

What I am fairly sure of is that if you asked a female team to make a game that appealed to women, it would differ greatly from one made by all men that was also supposed to appeal to women. I guess because the women would be drawing on their own personal feelings and experiences and the men would be going on their instincts on what appeals to women and probably relying too heavily on stereotypes – girls like make-up, ponies and shopping!

The single biggest thing in my opinion is not to have annoying female sexist stereotypes! A good game is a good game - if you like that type of game, like the subject matter, and the game is well executed then you're probably going to like the game no matter what sex you are. However, a big busted, scantily clad damsel in distress is likely to put female players off.

Working in the games industry is a fun, exciting place to be, every project is different, things are always moving on and evolving - it's not specifically attractive to women, but really to anyone thinking about the games industry.

Nina Kristensen, Co-Founder, Just Add Monsters

Nina Kristensen is the Australian co-founder of Cambridge-based games company Just Add Monsters, who released Kung Fu Chaos in 2003. The company was made a subsidiary of Argonaut in 2000.

How did you get involved with the games industry?

I got into games totally by accident. I came over to the UK about nine years ago really just to take a year out after university and see some of Europe. After just a couple of months, I drew up my CV. Apparently it was games companies that were interested, which I thought was odd given that my degree was in Industrial Design. Lucky for me though, it turned out that I adored working in games and I've been here ever since!

How have the executives/publishers reacted to you, as a woman game creator?

I haven't really noticed any difference between the way they react to me and the way they react to the other two directors who are both men.

What role do you hope JAM will play in opening up the market for women?

I believe that making games more appealing and accessible to women is key to opening up that market. This should NOT involve making games less appealing to men. At JAM we are not creating a game specifically targeting a female audience but we do inherently give consideration to that market simply by having at least one female key decision maker. I hope to hire more.

Why do you feel it's important for women to get involved with technology?

Anyone who wants to work in this world needs to be tech-friendly. Despite the many wonderful forms technology can take, technology is a tool, a very important tool but still just a tool. If you don't have good tools or if you don't know how to use them, you can't make a good product and you're doing yourself out of a job (many, many jobs!).

How do you make your work environment attractive to female employees?

I've found the games industry to be a very welcoming place. It contains an incredibly broad range of highly creative individuals from a huge range of wildly varying disciplines. It is easy for this to make for a naturally friendly environment and we don't do anything in particular specifically just for our female employees.

Getting In

Vicky Cairns, Consultant

Vicky Cairns is a consultant at Britain's oldest games recruitment agency, Aardvark Swift, established in 1989. She helped co-found the company which now places over 400 people every year in a client base of 1500 worldwide companies. The recruiters at the company specialise in Design, Programming, Art, and Management. Vicky's forte is Design.

Why do you feel there is such a disparity between the numbers of men and women applying for work in games?

I think a lot of it is the perception that it is an "all boys" industry so women don't feel welcome. Most games to date have been aimed at the male market, so women haven't really seen the appeal of the games industry as a legitimate career, but now that views are changing and it's more socially acceptable for girls to be gamers, I think more women will be interested in a career in games.

We have seen an increase in the number of women applying as graduates. I think that this is because technical courses are no longer seen as being for boys only. The more women we can attract onto these courses the more women will get jobs in games: games will then be seen as open to women and the cycle will perpetuate itself. I'm not sure there will ever be an equal number of men and women in games, but I do think we'll see an increase.

Many companies would like to hire more women in order to create more gender balanced games and also to have a more balanced working environment.

How many women in the general public do you think are interested in working in the games industry?

I think that there are more women now interested in a career in games due to the changing visibility of the games industry. Now that home entertainment has become more popular (and more affordable) many people have consoles or play MMOG's, which means that there is a strong social element to the hobby. Now that games is seen as a "proper job" I see no reason why more women won't apply.

What do companies expect from their workers?

The games industry is a very demanding sector to work in, with loyalty and hard work expected at all times. There is a massive sense of team work and when a project is completed a massive sense of achievement. I think that games offers a rollercoaster job; there are more highs and lows than any other industry that I have seen. Despite the insecurity of many projects the team still works with dedication and passion for what they do. Ultimately it offers a tangible product that can in many cases get worldwide recognition.

What else do you feel will have to shift about games jobs when more women start working in games?

I think that the main shift that is needed is not the perception of the companies or the working environment but the perception of women outside of the games industry. I have come across lots of women who love to work in games, it's attracting women from outside games that is an issue.

Mary Margaret Walker, Co-Founder and CEO, Mary-Margaret.com

Mary Margaret Walker is co-founder and CEO of Mary-Margaret.com, the US' leading games recruitment agency. It was established in 1996. Before becoming a recruiter, she worked at Origin Systems and 3DO. She is a founding member of the International Games Development Association.

Why do you feel there is such a disparity between the numbers of men and women applying for work in games?

We believe it is because, from a young age, boys are drawn to computer and video games and girls, either by their nature or the nature of the games available, are not.

What kinds of women are interested in working in games? What kinds of positions do they apply for most?

A large number of women who work or who want to work in the games industry are highly creative, idealistic, and gamers themselves. They apply to art, management, customer relations and marketing positions. Many other women are career-driven, upwardly mobile and aggressive, and they tend to be in executive or sales positions. Software sales still seems to be largely a man's club but we do know of many successful female salespeople. The rarest women in games are the engineers and designers - and we want more of these.

Why is this industry particularly welcoming to women?

Games is still perceived as a run-for-and-by-boys business. We believe it takes a brave woman to want to get in to the game industry. Once in, we have found (through personal experience) game developers to be incredibly tolerant and welcoming, not really caring about gender, sexual orientation, race, religion or any personal trait. It's getting through that initial wall that is hard.

What do you feel is the best way to get more women involved making games?

Encourage game publishers to increase the number of games they put out that have gender inclusive game designs. Make games more accessible for girls and you will see more women want to have a career in the game industry.

Are companies interested in hiring women?

Companies are absolutely interested in hiring women but there is a shortage of qualified female candidates. They want to diversify. Companies want to be able to show an outward face of integration and equality. The way they do it is to ask for "diversity candidates" because they cannot overtly advertise for women applicants. There is very little a company can do to encourage more female applicants apart from selecting how and where they seek them. In the case of game companies, advertising in Cosmopolitan is too far a stretch.

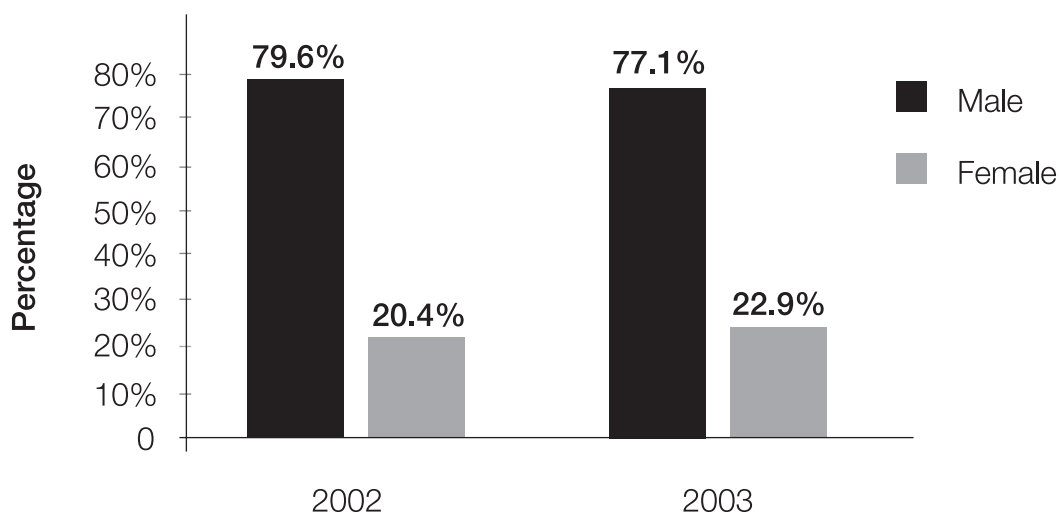
Current Status and Outlook for Korean Game Users

The Korean game market has been enjoying a breathtaking annual growth rate of 15% mostly thanks to online games and mobile games. The turnover in 2003 amounted to as much as 3.9387 trillion KRW, of which online games accounted for 754.1 billion KRW, showing a record high annual growth rate of 65% for two consecutive years. The mobile games market has grown rapidly as well to be equivalent to 100 billion KRW in 2002 and 145.8 billion KRW in 2003. Compared to this, PC package games and arcade games markets have witnessed a continuing decline.

The main customer segment of the game market, which had established its position as one of the nation's target industries of development, was male users in their teens and 20's and, accordingly, popular game genres were strategy simulation games or RPG games. A new development, however, has been made in the Korean game market. Female and elderly users have emerged as new main customer segments while the Korean game market has just started enjoying dramatic growth. In terms of favoured game genres, these female and elderly users prefer board games, which are relatively easy to play with, to strategy simulation games or RPG games and this market is expanding its share with the creation of the game portal market that has established game sites with its focus on board games.

This new trend has been witnessed in many aspects; female professional gamers and game casters are getting much public attention; the need for women-oriented game development and the number of female game developers are on the rise; the production of games targeting female customers is coming to the forefront.

Ratio of Male and Female Workers in Game Industry (comparing 2003 against 2002)



These behaviours and trends of Korean female game users are elaborated in the section of comparative analysis of male and female user characteristics in '2004 The Rise of Korean Games', a white paper, issued by KGDI (Korea Game Development and Promotion Institute). The survey of game users used for '2004 The Rise of Korean Games' was conducted for 1500 game users aged 9 to 49 in February 2004.

The first study on 'average daily spare time' did not show much difference between male and female users. Yet the response to the rate of using games in their free time told us that male users spent more of their spare time playing games than female users; the biggest portion of male respondents, 20.4%, selected the category 'less than 20-30%' while 35.1% of female respondents checked the category 'less than 10%'.

According to the data, 75.3% of the respondents, or about 7 out of 10, said that they have tried playing games. When classifying data by gender, the percentage of male users turned out to be higher than female users. When classifying data by age group, it was revealed that the percentage of people using games increased in the younger age groups.

Meanwhile, in the preferred game platform, online games held the largest portion at 50.6%, followed by PC games, arcade games, mobile phone/mobile games, and video games. The male group showed higher preference for PC games and video games while the female group showed a higher preference for mobile games and arcade games. Online games scored the highest in user preference, followed by arcade games, PC games, online games, video games, and mobile games respectively. Arcade games and mobile games showed a slightly higher percentage in the female group than in the male group. Conversely, PC games and video games showed a higher percentage in the male group than in the female group.

In the preferred game genre (multiple responses permitted), web board games (29.9%) had the highest turnout, followed by RPG (27%) and strategy simulation games (23%). When compared with last year's survey data, the preference for web board games and RPG increased significantly (10%). The preferred game genre showed very distinct differences by sex. About 32.4% of the male respondents most preferred RPG while 51.3% of the female respondents most preferred web board games.

In response to the question of how games affect their daily life, male users gave more positive responses than their female counterparts. For the question of what is the most important factor to select a game, the highest percentage of male respondents said 'favoured genre' while more female respondents selected 'recommendation by other users' or 'interesting item' than male respondents. As for the question of what type of game they want to see developed, 44.9% of men and 19.5% of women chose 'fusion game', displaying some difference in preference of gender while a much higher percentage of female respondents picked up 'specific function-oriented game', 'educational game' or 'experience-oriented game' than their male counterparts.

Another intriguing observation has been made along with the above results. When we categorize correspondents into four segments, based on whether they are game users or not and how often they enjoy games: core users, general users, dormant users and potential users, female users make up bigger portions of dormant and potential user segments. Considering that the number of game users has continuously been soaring and more and more women and the elderly have joined this gamer population, the current status, in which the portion of female users in the dormant and potential user groups is higher, will definitely undergo some change.

Source: KGDI

Advertising and its Malcontents

Advertising has played a large role in the development of the social perception that computer gaming is a male pastime. Contemporary ads like *BMX XXX* (Acclaim, 2002), *Dead or Alive Beach Volleyball* (Tecmo, 2003) and *Fear Effect 2: Retro Helix* (EIDOS, 2001) are undeniably aimed at the adolescent male, and while some of the titles feature “female-friendly” elements in their gameplay, the ads reportedly deter some women from going to the paypoint with the product.

Examples of this phenomenon have occurred throughout gaming history, from GameBoy Advance SP hardware (Nintendo, 2003) to Lara Croft in a bathing towel (*Tomb Raider*; EIDOS, 1995). Schott & Thomas (2004) indicate that this form of promotion simply undermines the existent female incentive to play.

In contrast, Sony PlayStation (Sony, 1995) and PlayStation 2 (Sony, 2000) hardware promotional material has utilised a genderless perspective in the advertisement of its products focusing on humour and the “experience” of owning its machines. This, along with the saturation of the market, has resulted in a neutral brand which translates into the uptake of PlayStation and PlayStation 2 by both sexes.

Women’s magazines are responding to the release of cross-gendered hardware like Dance Mat controllers, EyeToy and SingStar by promoting these interactive products within their pages. Such uptake is encouraging, and by continuing to advertise in female-centred spaces, a broader demographic will grow to appreciate what the games industry has to offer.

heat promotion

The way you choose to combine...
Don't stop movin...
Can you feel the music?

Have all ways been here...
So you better...
Get the party started!

Time can't...
When I go round...
Sing round round

Fun, anyone?

Think you can rock like Avril or belt out ballads like Westlife? Now you can prove it with SingStar from PlayStation...

FIDELITY WITH YOUR BOYFRIEND hogging the PlayStation with his racing games? It's time to get your own back, and we can't think of a better, more fun way to do it than playing SingStar, the brilliant new PlayStation game that allows you to live out your pop-star fantasies.

Come on, you've always thought you can sing as well as James! - OK, so that's only after a drink or two down the pub - but now you can prove it. This fab new game comes with two microphones and recognises your pitch, tone and rhythm so we're not talking just simple karaoke, here: this is way better. And it's only £39.99.

Swap your hairbrush for a microphone and sing your heart out to Beyoncé, Madonna in the privacy of your own bedroom, or invite a bunch of mates around for some *Pink Get The Party Started* multi-player action. SingStar's party game mode Pass The Mic allows you to sing in teams.

And the Star Maker mode lets you become the star. The game features a huge selection of tracks from a wide variety of genres so there really is a song for everyone.

We can't guarantee that you're not going to wake up the next morning with one hell of a headache, but we can guarantee that you'll have had one hell of a night to remember.

PlayStation 2

heat promotion

You need your pals...
So you could be...
Soak up the...
The villa has...
Six bathrooms

More fun, anyone?

As if SingStar™ from PlayStation® isn't fun enough, now we're offering you the chance to win an amazing trip to Ibiza for you and five of your closest mates!

Whether you're singing solo to James or making a hit out of yourself with a Westlife ballad in front of all your pals multi-player style, you're guaranteed a fun time with SingStar™ from PlayStation®. And now, the fun could be about to increase...

This stunning cliffside pad is to die for with ten double bedrooms, six bathrooms, three lounges, a private pool and a roof terrace for all night partying. But PlayStation® are not only offering the house to stay in, they are also throwing in a taste of the celeb lifestyle with limo, champagne dinners and VIP entry to some of Ibiza's hottest clubs. And if that's not enough, you'll spend an afternoon being pampered by SingStar's team of masseurs, nail technicians and beauticians. But back to the bedrooms. Yes, this amazing place sleeps 16, so three of you will each be able to take five of your mates!

The villa is available from 19 June to 23 June 2004. Flights and transfers are included in the price. All you need to do to be in with a chance of winning is answer the question (right).

Win a fab holiday in Ibiza!

How many bathrooms are there in the SingStar™ mansion?

A) Six
B) Eight
C) Ten

E-mail your answer with your name, address and age, and the names of the friends you'd like to take with you, to creative.solutions@sony.com by midnight Thursday 10 June.

PlayStation 2

Source: Heat magazine 2004

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