



de Blob,
Blue Tongue Entertainment

History of Game Development in Australia

Australians have been making videogames for an international market since games moved from the arcades to home computers and consoles in the early 1980s. Despite this long history in the industry and the creation of a number of influential games, the profile of game designers within Australian cultural and media industries has neither attracted the attention of most Australians nor been widely celebrated as a significant Australian cultural achievement.

In 2008 the Australian games development industry employs over 2,000 people in almost 50 studios throughout the country. Most of these companies are independently owned and operated and employ just a handful of talented individuals while the largest eight studios account for 80% of the industry's workforce. A number of these larger Australian studios are owned by some of the world's most well-respected international development companies.

Development studios are production companies; collections of designers, programmers, animators, artists, producers and managers who create videogames from initial concept to final product. The Australian development community has produced hundreds of commercial titles over the span of almost 30 years, from the 8-bit days of the second generation of videogame consoles right through to the present seventh generation of contemporary machines, the venerable PC and more recently, mobile devices. Since the beginning of

the industry in Australia, local developers have had to adapt to ever-changing technology horizons far away from the epicentres of console research, development and manufacture.

Krome Studios' CEO Robert Walsh observed, "While Australia may be physically isolated from the rest of the games community, it is culturally close to the rest of the games world. Australia is very much aware of and tied to the international gaming community."

The productivity of Australian developers reflects Walsh's view. Australian companies have produced a vast diversity of respected games such as *Powerslide* (1998) Ratbag, *GP500* (1999) Melbourne House, *Trainz* (2001) Auran, *TY the Tasmanian Tiger* (2002) Krome, *Top Gear Rally* (2003) Tantalus, *Jurassic Park - Operation Genesis* (2004) Blue Tongue, *Heroes of the Pacific* (2005) IR Gurus, *Destroy All Humans!* (2005) Pandemic, *Nicktoons: Battle for Volcano Island* (2006) Blue Tongue, *Medieval II: Total War* (2006) The Creative Assembly, *Avatar: The Last Airbender* (2006) THQ Studio Australia, *BioShock* (2007) 2K Boston & 2K Australia, *Fury* Australia's first MMORPG (2007) Auran, *The Fast and the Furious: Fugitive 3D* (2007) Firemint and *Puzzle Quest: Challenge of the Warlords* (2007) Infinite Interactive.



Destroy All Humans,
Pandemic Studios

National Identity and the Games Industry

There is a powerful perception that the role of Australian film and television is to tell Australian stories and reflect Australian culture. This idea is manifested in government funding for Australian projects and forms of legislation such as screening quotas to preserve Australian content. Games however, have escaped this mandate and are directed at an international audience. Within games themselves, characters and spaces, language and iconography rarely focus on Australian stories and Australian identity. There are many reasons for this but primarily videogames focus on an international market and developers' relationships with international publishers.

Chris Mosely (CEO of Red Tribe) says his company doesn't market itself as an Australian game developer. "We're part of the international game development community," he explains. "We don't really see ourselves as an 'Australian Developer' although we are physically based in Australia. Of course we are patriotic and care about Australian development as a whole, but it would be unwise to ignore the fact that it's a global industry and it's globally competitive. Our standards are set by international criteria. We market ourselves in exactly the same ways that a game developer in the US or the UK might."

Original IP and franchise activity transacts cultural and industry competition in a distinctive way to affect the current and developing character of Australian games. The diagnosis of the games industry in Australia is remarkably positive for three reasons: there is recognition internationally that studios located in Australia are not only viable, but prosperous; there is a view that Australian designers, animators and programmers are innovative and productive; and the entrepreneurial acumen of Australian game start-ups is world-class. As a result, international publishers entertain game concepts from Australian developers and subsequently invest to create and publish games internationally that represent Australian creative culture and technical expertise.

Critical to success for the Australian industry is its *esprit de corps* the uniqueness of its identity, and uniformity of its vision and mission to place Australia firmly on the map of global games development. The industry-based Game Developers Association of Australia (GDAA) has been significant in promoting this since its inception in 1999. Important initiatives also emerged from state governments in Victoria through Multimedia Victoria, and Film Victoria and Queensland through Queensland Games. These exercises in coordination and cooperation are seen as critical to Australian competitiveness in part because game development has become highly specialized, costly and competitive. Significant costs of production have meant that game development is primarily an export industry with approximately 90% of total industry revenues derived from exports. According to Insight Economics¹, in 2006 the Australian games industry generated revenues of approximately \$110 million indicating that games are a very significant economic force in the creative industries.

However, games as a creative industry are under-recognised by federal government and perhaps the finance industry as a substantial business interest, let alone a powerful cultural force. The trans-national structure and conduct of the games industry has meant that buyouts, consolidations, acquisitions, and licences have affected the content and scope of games production in Australia. International publishers continue to consider game concepts from Australian developers and subsequently invest to create and publish games internationally that represent Australian creative culture.

To survive, Australian developers have produced games for international markets on tight budgets and production schedules. Developing a console title is a process that can take a couple of months to several years, with an average of around 24 months.

¹ Australian Electronic Games Industry Profile Report (November 2006)
Prepared by Insight Economics for the Australian Games Developer Association. http://www.gdaa.com.au/docs/GDAA_Industry_Profile_Report_221106.pdf



Halloween Harry
Interactive Binary Illusions

The Business of Making Games

A key to shipping successful game titles has been to forge strong relationships with publishers. The publisher often agrees to fund the costs of development through a system called "milestone payments" for the right to market, publish and sell the game.

Games begin with concepts and those concepts may be original in nature or may be derived from a pre-existing franchise under licence or contract. A game with original intellectual property (IP) is what the Executive Director of the International Games Developers Association (IGDA) Jason della Rocca calls internal IP (that is internal to games media). This is opposed to external IP where the IP at the core of the game originally existed outside of games media, as television or film productions.

Each game is a significant creative and economic enterprise. The business decision to make a game takes multiple commercial factors into account. With budgets stretching from several thousands of dollars in the past to several millions of dollars today publishers don't make decisions on a whim. Game publishers are reluctant to take risks on new internal IP created by an independent developer. Publishers are large international businesses and operate according to a culture of fiscal conservatism.

But Kevin McIntosh of Torus Games knows well the many reasons publishers call on Australian developers, including the unique advantage gained by different time zones. "The benefit for American publishers is that they request items at the end of their day, and by the time they've gone home,

slept and returned to the office, the work has been completed and they have the day to review it; we're like game elves working away through the night."

Working with a known 'brand' gives the publisher an instant recognition and a higher possibility of recouping the significant costs involved in the production of a game title. In this light, the trust that international publishers have placed in the Australian development community is a testament to the creative and managerial talent involved in handling value-laden licences that feature well-known stories and characters.

The inside story of game development in Australia is one of pioneering individuals and families, of the companies they established and the teams of people that came together to create videogames for a competitive international market.

"My family works in the business and my dad started Torus Games," says Kevin McIntosh. "He was in computer games from about 1986, so I grew up not only with video games all around me, but with the development of games. He would continue making games at home during the evening and we would get to experience the whole project. When the company was about 5 years old, it started to grow with titles like *Duke Nukem GBC* and *Carmageddon TDR 2000*, so new departments had to be created. I came in as the first tester at Torus and within a year I had become the first producer. My brother Andrew is a lead artist at Torus and my other brother David leads the QA department."

Early period: 1978 – 1992



Bedlam,
Beam Software (GO!), 1989

The timeline that follows presents many of these stories and examines major Australian game developers and their creative outputs. Success and growth have been adroitly handled, but remain demanding as Robert Walsh (Krome) has revealed. "Our biggest challenge has been to maintain a culture whilst growing so rapidly. When we started, there were five of us, and then twenty. It was very small; we were all on the same floor. It was very personable and we all knew each other very well, we were more like friends. Now that we've grown ..., keeping that culture ... has probably been the biggest challenge. Our culture is who we are, but when you get to certain sizes you have to put systems in place that make it not as culturally friendly."



Alfred Milgrom in *Business Review Weekly*, Feb 1984
(Photo: Peter Russell)

The beginnings of the videogames industry in Australia can be traced back to a book publishing company called Melbourne House (whose game development arm was later called Beam Software). Established in 1978 by Alfred Milgrom and Naomi Besen, Melbourne House took their first steps towards establishing games development in Australia by publishing computer books and distributing US games in the UK market. By 1981 they had secured the licensing rights to *The Hobbit* which they then released for the Sinclair Spectrum the following year. *The Hobbit* based on J.R.R. Tolkien's book was a text adventure game in a similar vein to the original *Zork* trilogy (1980-1983) but with the addition of images to support the text.



Horace Goes Skiing,
Beam Software (Psion / Melbourne House), 1982



The Way of the Exploding Fist,
Beam Software (Melbourne House), 1985



The Hobbit,
Beam Software (Melbourne House), 1982 (Spectrum)

With *The Hobbit* becoming an enormous success in Europe, Beam Software went on to produce a number of influential titles for both the Spectrum such as the *Horace* series (1982-1985) and for the Commodore 64 such as the karate-themed fighting game *The Way of the Exploding Fist* (1985). Throughout the years Beam continued to produce quality games with the outstanding driving title *Le Mans* (2001) for the Sega Dreamcast just one example. Beam also fostered much local talent who spawned many of Victoria's game development studios of the future including Torus Games and Tantalus Interactive.

Adam Lancman, first as financial director then as joint managing director, was instrumental in the pioneering achievements of Beam throughout the 1980s and 1990s and subsequently as president of the GDAA from its inception in 1999 to his death in 2005. At the time of Lancman's death Australian Game Developers Conference co-ordinator Casey Gregory said he "helped grow a small fledging industry and put the Australian game development community on the map".

In the early '80s Roger Keating and Ian Trout, two strategy game producers, got together and started Strategic Studies Group (SSG) in Sydney. Their first game *Reach for the Stars* (1983), a sci-fi turn-based strategy game was released on multiple platforms. SSG went on to publish the long-running *Warlords* series created by Steve Fawkner beginning in 1990.

Micro Forté was founded by John De Margheriti in Sydney in 1985. Their first game, *America's Cup Sailing Simulation*, was, like many of Beam's titles, designed for the extremely popular home computer, the Commodore 64.

Due to the high installed user base of the Commodore 64 in Australia at the time and the profile of the event in our consciousness, Micro Forté's *America's Cup Sailing Simulation* set a record for sales in Australia by selling over 60,000 units. De Margheriti grew his company over the decades developing BigWorld Technology, an MMOG middleware solution and producing titles such as *Fallout Tactics* (2001) and *Hot Wheels Bash Arena* (2002).

De Margheriti's contributions to the landscape of Australian videogames are significant. In addition to his achievements with Micro Forté and BigWorld he saw the importance of education and training to the future of the industry and so he established the non-profit Academy of Interactive Entertainment (AIE) in 1996. He launched the first Australian Game Developers Conference in 1999 and founded the GDAA in the same year. As a pioneer in Australian game development De Margheriti made a major contribution through investing his expertise, energy and his own monies in establishing core industry infrastructure to promote and grow the industry.

In the late 1980s and early 1990s a number of independent designers were making games for shareware distribution. One of those was John Passfield who decided to take the plunge and start his own company. Passfield established Interactive Binary Illusions in 1991 in Brisbane creating a PC version of his incredibly successful shareware title *Halloween Harry* (1993) and others such as *Flight of the Amazon Queen* (1995). His talents extended past game design encompassing many facets of games production over a number of years in the industry.

Middle period: 1993 - 2002



Le Mans,
Infogrames
Melbourne House



Le Mans,
Infogrames
Melbourne House

The middle period of Australian game development featured the birth of new studios and the export of titles popular on the international stage.

From 1993 to 1996 a torrent of activity hit the development community with the start-up of a number of studios that went on to make significant contributions to Australia's profile. Ratbag Games in Adelaide, Auran in Brisbane and Torus Games, Tantalus Interactive, Blue Tongue and IR Gurus Interactive in Melbourne and Auran in Brisbane all emerged. Developers quickly took to creating games for fifth generation consoles like the Sega Saturn and the Sony PlayStation released around the world in 1995 in addition to focusing on PC development. The vision and enthusiasm of these new studios saw such titles as Torus's *Sentinel* (1994), Tantalus's *Manx TT Superbike* (1995), Blue Tongue's *AFL Finals Fever* (1996), Auran's *Dark Reign* (1997) and Ratbag's *Powerslide* (1998).

In 1999 Krome Studios (previously Gee Whiz! Entertainment) was founded by Steve Stamatiadis, John Passfield and Rob Walsh and began operation in Brisbane. Within three years it shipped *TY the Tasmanian Tiger*, the highest selling Australian-made title of its time. The *TY* series is significant in that Krome developed its own intellectual property that placed the company in a relatively secure financial position.

In 2000, Boston-based developer Irrational Games, creators of the revered role-playing game *System Shock 2* (1999) established a studio in Canberra. With a view to develop titles collaboratively in two hemispheres, Irrational Games set to work on *Freedom Force* (2002) and shipped *Tribes: Vengeance* two years later. Both titles received world-wide critical acclaim.

In an effort to support the growing games sector, the Victorian government launched its Game Plan initiative in 2000 in which they took a three pronged perspective to assist the game development sector by improving infrastructure, growing local businesses and developing skills. Film Victoria launched programs specifically supporting the development of internal IP and skills development

and extended its very successful film based cash flow facility to support games development. As part of these initiatives, studio IR Gurus was able to develop both *AFL Live* (2005) and *Heroes of the Pacific* (2005).

Three overseas developers set up studios in Brisbane in the space of three years. In 2000, US developer Pandemic established a development studio with a number of Australian staff who worked on *Dark Reign 2* (2000). The Pandemic team shipped the tongue-in-cheek '50s sci-fi games *Destroy All Humans!* (2005) and its sequel *Destroy All Humans! 2* (2006). Two years after Pandemic hit Brisbane, UK developer The Creative Assembly founded their own Australian base of operations. They collaborated on one of the most acclaimed RTS games in history, *Rome: Total War* (2004) and developed the series with *Medieval II: Total War* (2006). Then in 2003 THQ Inc. opened THQ Studio Australia where they specialise in Nickelodeon licensed titles such as *SpongeBob SquarePants: Lights, Camera, Pants!* (2005).

After the success of *Dark Reign* (1998), Brisbane studio Auran released *Trainz* (2001) the first in a long series of titles that garnered an international following to become the world's number one train simulator, dominating and effectively shutting out of the market a competing product made by the well established Microsoft Games Studio. The success of *Trainz* has been credited to many factors. Among these was the innovation of Download Station, an online facility allowing the fan community to build and exchange terrains, rolling stock, locomotives and scenery for free and for fee. This initiative meant that the *Trainz* franchise could include a vast array of assets that would have otherwise been too costly for the developer to produce in isolation.

In 1999 Micro Forté began development on massively multiplayer middleware technology by raising venture capital and winning Federal R&D grants. By 2002 this spun off to form a separate company Big World who were one of the first to take this type of technology to market.

Late period: 2003 -Today

The late period of games development in Australia has been characterised by increased risk and a consequent shake-out of studio properties coupled with a growing emphasis on industry professionalisation and tertiary training. Through this period, Australian developers have cemented their reputation as world-class sources of game content and many firsts such as *Top Gear Rally* (Tantalus, 2003), the first Australian title to be published by Nintendo and *Jurassic Park - Operation Genesis* (Blue Tongue, 2004) developed for multiple platforms. Australian studios continue to secure major development deals involving sought-after licensed properties.

Brendan McNamara, the director of Team Soho's *The Getaway* (2002) founded Team Bondi in Sydney 2003. They set to work on a massive next-generation 1940s detective thriller titled *LA Noire*. The game is to take more than four years to complete and is scheduled to be released in 2009. Other significant deals include Krome's project *Star Wars: The Force Unleashed*.

Australian developers are increasingly seen as world-class providers of mobile games with titles like *The Fast and the Furious: Fugitive 3D* (2007) and the *Madden NFL* series by Firemint Game Development and *Sports Fight Night Round Three* (2006) by Iron Monkey Studios.

Steve Fawkner, veteran game designer and creator of the *Warlords* series, established his own company, Infinite Interactive in 2003 and recently embraced the casual game market with his multiplatform release *Puzzle Quest: Challenge of the Warlords* (2007). *Puzzle Quest* was lauded world-wide by game critics as one of the most innovative and captivating games of 2007. Capitalising on his *Puzzle Quest* series Fawkner is developing another multiplatform title *Puzzle Quest Galatrix*.

In August 2005, Chicago developer Midway Games bought Ratbag Studios. However, after only four months Midway closed Ratbag. On the strength of TV and a number of other successful titles, Krome stepped in and picked up the

pieces opening their Adelaide studio in 2006. In the same year, Krome added to its studio portfolio by acquiring Melbourne House from Atari and changed the name to Krome Studios Melbourne.

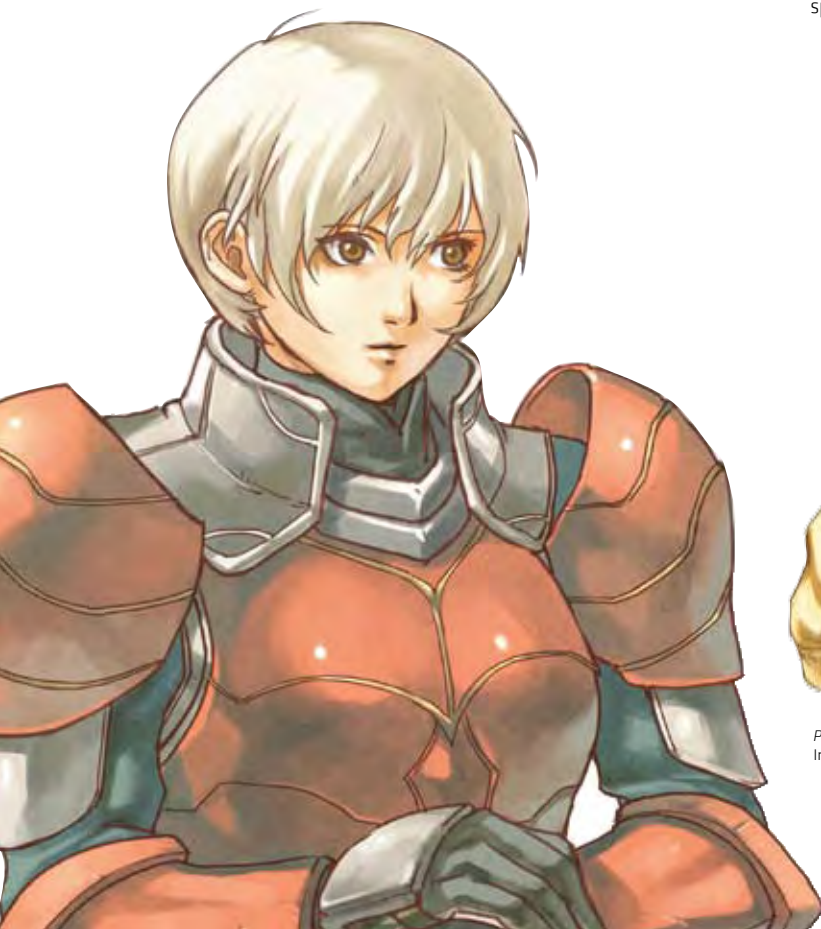
For Krome's CEO Robert Walsh the decision to ensure Australia's oldest development studio continued to operate was grounded in his history with the company. "I knew Adam Lancman personally, the CEO of Beam/Melbourne House who passed away last year," said Walsh in a 2006 interview. "He was probably the founder of the Australian games industry. Some of it was personal and emotional - I just couldn't see all the hard work that he'd put his life into being dismantled." Krome grew to over 300 employees in 2007 making it Australia's largest development studio.

In contrast to the success of Krome was the sad news at the end of 2007 that part of Auran was in receivership. The experience of working with the fan communities led Auran to spend a number of years and resources to create Australia's first Massive Multiplayer Online (MMO) game, *Fury* (2007). MMO development is a high risk market and despite elongated engagement with the gaming community, the title did not sell well on its release.

BigWorld with their technology focus has however continued to successfully promote their MMO middleware internationally expanding into South East Asia.

During this period, state government initiatives to enable games industry growth began to flourish especially in Victoria and Queensland. Indeed, the competition between Victoria and Queensland for the talents of game designers has intensified as a result of these initiatives. Both states boast similarly large numbers of full-time workers in the industry and between them are home to 90% of Australia's game studios.

The Victorian government programs with Multimedia Victoria include supporting travel to game development markets, purchasing development kits and sponsoring international and national game festivals and events. Film Victoria's



Puzzle Quest: Challenge of the Warlords
Infinite Interactive



*Transformers Armada,
Atari Melbourne House, 2004*

Digital Media Fund offers further support through prototype funding, production investment, access to cash flow facility, support for international market travel, business support and internships.

In Queensland, the Information Industries Bureau has formed Queensland Games which is responsible for developing the games sector in that state. Its initiatives include assisting Queensland game developers to participate at international conferences and expos and supplying seed funding to help operators develop business plans and acquire development kits.

These initiatives appear to be paying off. According to the GDAA, over 90% of game companies are expected to grow during the next three years and 70% of companies expect to increase their level of investment in their own intellectual property development during this period.²

However, growth in Australian games development is now constrained by available talent. As Robert Walsh observed, "Team sizes with next-gen have become so big. All the developers in Australia are looking for the same people. The thing we have to remember is that we have a population of twenty million compared to America's 200 million."

With the growing need for suitably qualified staff in the industry, a number of universities have begun to offer games courses - from Diploma to Degrees. Three varieties of computer game courses are now offered throughout Australia. Some are drawn from information technology and computer science courses and focus primarily on programming, some are drawn from animation and the arts and focus primarily on design and others are drawn from media degrees and focus primarily on the industry as business.

Game On!

The computer and video games industry is a large and global enterprise. Australian game developers are right there in the international mix.

In 2007 events have seen major corporate restructuring on an international scale with BioWare and Pandemic being acquired by the giant Electronic Arts. This was followed by the announcement of Activision's merger with Vivendi Games in a deal worth US\$18.9 billion, a deal that will make the company the world's largest videogame publisher.

With a vibrant and diverse development community producing games for every contemporary console, handheld, and mobile platform, producing significant

titles such as *Puzzle Quest* and *BioShock* and a growing corporate, government and educational infrastructure and support, the Australian games development sector looks set to continue to be one of this country's major creative industries. With record growth in the global games industry, local investment will make it pay to play.

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