To give an impression of many games mentioned, I have linked to videos showing them off. While these should give a good enough overview of what the game is about and why it is noteworthy, games are commonly many hours long and rely strongly on their interactive nature. Please keep this in mind, and if a particular concept piques your interest, I encourage you to try it out.

Foreword

I want to start by noting that there are many independent game developers ("indies") working on amazing games all around Australia. Every month, at the Off Broadway Hotel in Sydney, there is a game dev meetup known as "Beer and Pixels" which regularly turns out over 100 people, usually with at least 15 games being shown off, and this is mostly composed just of people from Sydney and its suburbs. PAX (a gaming convention) held its first non-US convention in Melbourne in 2013, and is currently planned to continue every year until at least 2019. 35,000 people attended on its first year, including many like myself who travelled interstate with a student's budget.

While I'm confident there will be a wide range of thought out responses submitted to this committee, I caution not to take the raw number of submissions as necessarily indicative of the potential market and number of developers already here. Many of the more enthusiastic members of the industry who would normally be expected to jump on this opportunity feel largely ignored by government. Compounding the issue, since the game dev industry is comparatively small here, almost exclusively comprised of indies, most relevant game dev news comes from overseas, so many developers simply wouldn't know about this opportunity.

The developers are here. The consumers are here. There is international interest, and it's slowly growing. The following years could be crucial for establishing our local talent in the global scene, or they could further solidify our current reputation as a country uninterested in the game dev industry, and bring out even fewer responses. So thank you for opening up to the industry, and considering seriously the ways we may reach the former result.

Summary

I see three main areas to focus on to improve the games industry: The classification system, how games are treated, and internet access. We need a reworked and improved classification system for games, to bring them in line with film for example. The approach towards game development needs to be some combination of an art form and an SME, due to the unique challenges facing game development. Internet access is crucial to all aspects of game dev, and to growing the local demand for and access to video games in general.

Improve the Classification System

It is a sad fact that the current ratings system for games is severely lacking and outdated compared to both global rating standards and our own standards for mediums like Film and Television. For many gamers, the first and last thing they know about Australia is that its rating system is simply not up to snuff, and we are the butt of many jokes for it.

Left 4 Dead 2, a well-crafted and highly praised First Person Shooter about surviving a zombie outbreak, saw an "Australian version" that removed most traces of violence – dismemberment and most blood was removed, and dead bodies faded into nothingness after a few seconds – after failing to get classification. It was only last year, 5 years after release, that it was reclassified as R18+ Manhunt, a chilling game that puts you in the shoes of a man kidnapped and forced into a snuff film, had very well thought-out stealth mechanics and posed the question of morality towards the player,

as they committed terrible acts to survive. This game was refused classification, after already being rated MA15+ and having been sold on shelves for over a year.

Hotline Miami 2, a top-down stealth/shooter that has received huge levels of praise for the craftsmanship of its mechanics and its incredible storytelling, was refused classification because of "a scene of sexual violence". The scene, which lasts mere seconds, vaguely implies that someone is about to be raped, before being revealed to be the set of a movie. To this day, the game cannot be purchased in this country.

While some may make the argument that these depictions are grotesque and in some way immoral, it should not be the job of a classification board to decide what the public can handle; it is their task to accurately convey to the public what to expect content-wise from a piece of media, and bar only those that would be actively harmful to the public – a film that glorifies terrorism and attempts to recruit members, for example.

More to the point, classification should be comparable between comparable products. Simply look to the world of film. Saw, a series of movies about a kidnapper who traps his victims in elaborate setups that require horrendous acts to survive, such as cutting one's own foot off with a hacksaw, digging a key out of a living person's intestines, or wading through a pool of needles to find an antidote to a poison. They often also feature terrible consequences for those who fail, such as having their ribcage torn open.

The fact of the matter is that, for one reason or another, games are receiving harsh ratings for relatively benign elements like cartoonish violence, while films like Pink Flamingos and Human Centipede 2 are classified and available. There is a severe disconnect, and it serves nobody to have such a disparity between ratings systems, nor to ban these "problematic" games in the first place. Most people believe it is because Australia sees games as only for children, ignoring the incredible achievements of the medium such as Shadow of the Colossus, Metal Gear Solid, Dark Souls, or Brothers - A Tale of Two Sons. This is quite honestly one of the biggest barriers to the long-term growth of the game dev industry in Australia, as it is quite plausible that a local developer could not sell their game in their own country, and there would also be concerns over their ability to sell and distribute the work from here. It also keeps the local consumer base smaller than it could be, especially sending a message to many that once you're past your teens, gaming isn't a worthwhile hobby.

The solution required here is a review of the standards for gaming classification, and alignment of the classification board's judgements with those standards. I am in no position to state whether the members or guidelines, or indeed both, are to blame in this situation, but I can safely say the fact that Australia did not have an R18+ rating for video games a mere 3 years ago (introduced Jan 1st, 2013) is indicative of the issue and may point towards outdated standards.

Treat it like an Art and an SME

Last year, the remaining \$10 million in the Australian Interactive Games Fund (AIGF) was taken away in the budget. Without the grants from this fund, many developers who were beginning to establish a business and produce substantial games have simply had to pack up and stop. Even established art forms are still able to receive grants, with the Australia Council for the Arts (ACA) providing up to \$300,000 per year for four years to arts organisations. It is not clear if any grants provided are applicable to game development, but my and every other game dev's presumption is that they are not. I wasn't even personally aware of the program before I went looking for it, which is a good indicator of the attention currently given to the industry.

With all that said, game development still produces a product that needs to be sold, much like a film. Unlike a film or music, sales is the only revenue source for a game – there is no exhibit to show a game off, games don't get screenings, and developers can't go on concert tours. Realistically, with the proper funding, it is entirely plausible that the right style of game could earn revenue from a movie-like experience, where a group of people are granted access to the game with specialised tools, and charged for entry – indeed, this would be comparable to paintball. Another potential but currently young revenue stream is e-sports – if a multiplayer game has enough players, and enough of them are dedicated to playing the game at an elite level, then sports-like matches can be held and money can be made from sponsorships and viewing access (in-person or through a TV/online stream program).

However, all of these options require a business understanding that many indies lack in general, let alone those in this country. Making a good game is not good enough, marketing is incredibly important as is general business management – knowing when to hire more staff, when to cut features to keep within budget, and how much focus should be put on the core game versus bugfixing and polish.

I am fortunate, as I took Economics and Business Studies in high school as an elective, and also happened to have one of the best teachers to grace the education system. Even then, I feel ill-equipped to actually run a business, and will almost certainly be taking an unrelated business management course as I reach a point that I am able to sell my games in a decent capacity. Even still, I wonder how much of the content will be applicable to game development, and how many gaps there will be.

Direct funding of indies is the most helpful action right now. Game development takes time, often at least 3 years for a decent sized game, presuming multiple team members focussing on the game full-time. These people still need to eat and pay rent for those 2-4 years, and often have higher costs than most thanks to higher electricity bills and a requirement for fast, uncapped internet access. Aside from these ongoing costs there are also upfront licencing costs for a lot of game development tools, which are a required purchase if you intend to sell your game, as well as licences for auxiliary software like sound editing and 3D modelling. Making professional games is an expensive venture.

After funding, the next most helpful action would be to improve business education resources, or advertise existing ones better to game developers. A key point I would like to stress is that I and many like me do not know of any existing resources, indeed I only discovered the AIGF last year thanks to the news that it was defunded. Until recently, I wasn't sure if I needed an ABN to sell my games on the internet.

One of the core reasons game developers are often unaware of these things is that by and large, they get their information in a vastly different way to traditional business owners. For a game developer, the internet is the most crucial resource, and most of their news and information comes from it.

Solving this issue is a twofold approach, using either or both methods.

First and foremost, re-opening the AIGF and advertising it on social media, especially buying ads in places like YouTube and Twitter, would be the biggest short-term boost to the local indie game dev industry. Additionally, clarifying whether games are eligible under the ACA, and perhaps making them eligible if they are not, would certainly assist. It would also serve to get a booth at PAX and talk to the developers showing off their games there, and to support smaller events like Beer and Pixels.

Second, providing specialised business advice for indies will ensure that developers will go into game dev understanding how to build their game from the start, in a way that is realistic and can see success. There are plenty of experts in this all around the world, from indies to AAA managers, and many of them would be more than happy to provide input and assistance building a program like this.

Games are an art form, but one with a heavy dependence on the business side of things. They need to be treated and viewed as a combination of the two.

Improved Internet Infrastructure

As previously mentioned, most advanced resources for game development require an internet connection, particularly video tutorials, which for many are the best way to learn complex but core concepts, and livestreams by established developers, who are more than willing to explain their methods and assist with issues, not to mention the potential to network with such influential figures. Aside from learning resources, most actual development resources also require a strong and reliable connection; Game engines are often multiple GB in size, and game assets (3D models, textures, sound files, etc.) are also large for the number of them required. Other things like online backups and source control, uploading your game for others to play, and of course any kind of multiplayer game you host, all require a good internet connection.

I am currently living at a university campus, and have access to their direct fibre line. My experience with this is what I would consider "above sufficient", in terms of the speed with which I can download resources and stream video, and the reliability of my connection. I can compare this directly with the connections my peers have, and they are frankly unsuitable for game development. Not only is it difficult to get an unmetered connection, which is important considering again the amount of content that needs uploading and downloading, but a copper connection is wholly unsuitable from both a speed and reliability standpoint. It simply isn't good enough that if it's raining, you likely can't upload an improved version of your game, or update crucial software, or watch a usually withdrawn, high-profile game developer streaming their process.

Not only is a good connection important for game developers themselves, but it's important for growing the local market for games as well. Without a decent internet connection, a huge portion of gaming is essentially cut off, as consumers are basically unable to purchase games online and download them, and instead have to purchase physical copies from one of a very small range of stores. Furthermore, the difficulty in getting physical copies of your game created means that most games that don't achieve huge success or have a strong backing simply don't end up in these stores. The result of this is that most Australian games don't end up being bought by Australians, and Australians are mostly buying non-Australian games. This situation makes any attempt to foster the game industry through tariffs or tax exemptions largely ineffectual, as access is the key issue at hand.

The best solution to this issue is to invest heavily in improving our internet infrastructure which has lagged behind the rest of the world for decades, bearing in mind that a new, optic-fibre based solution would require far less maintenance than the aged and less advanced copper wiring we have now. If providing modern internet access standards is too costly or slow for the entire nation, it would be worthwhile providing subsidies and/or tax exemptions for game developers to pay for their own fibre access.

Conclusion

Game development in Australia is growing, and we have the opportunity to take hold of it and grow it into an industry recognized worldwide.

In order to pave the way for long-term industry growth, its products must be taken seriously, which requires a change to the way games are rated. We cannot have world-class game development while simultaneously refusing classification for highly regarded games based on the false presumption that they are merely children's playthings.

In the short term, the industry needs real, tangible support on a financial and advisory level. Active outreach to developers offering advice on managing a business, as well as with the tax and legal aspects, will greatly improve the chances of successful ventures by Australian developers. Better grant programs for the art can then be far more successful as the funds are able to help with the start-up costs and assist developers with their marketing voice.

To get Australian products out into the world, and grow the local market for them, improved internet infrastructure is a must. So many aspects of game development and gaming in general are heavily reliant on internet access, that continuing to lag behind the rest of the world severely hamstrings our ability to compete.

With a focus on these three aspects, and continuing evaluation of the state of the industry, Australia can most definitely be a world leader in game development. Even now, with the issues that presently face the industry, indies are creating incredible works of art that have sometimes been recognised the world over.

Afterword

Once again, thank you greatly for considering the game development industry. While I have provided various examples of the potential for games as art, I wish to provide some more, including some specific Australian examples. I'll provide both a brief explanation of the game and a link showing the game off, sometimes through a video, sometimes through screenshots, or occasionally through a link directly to the game itself.

- Antichamber One of the most well-known and well regarded Australian games developed in recent years, Antichamber is an unusual puzzle game that circumvents traditional logic and laws of physics, all while gently pondering life and its finer aspects.
- <u>Birdsong</u> A beautiful platforming game made for Ludum Dare 31, a game jam where the
 participants are given just a few days to make a game from scratch, based on a theme.
 Birdsong won this game jam, which took place December 2014. You can download the game
 for free here.
- <u>Hacknet</u> A recently released hacking-themed game that tells a mysterious story mostly
 through a command line interface. While it's far from teaching people how to hack, it does
 teach some simplified computer security lessons and provides compelling gameplay mostly
 through typing. A great example of a game that shows IT can be compelling, by a developer
 in Adelaide.
- Armello A recently released multiplayer turn-based strategy, in which the king has become
 corrupted by some magic, and the players must battle the blight, the king, and each other in
 order to claim the throne. It has been well received and praised ever since its debut, and I've
 personally heard multiple popular gaming personalities fawning over the title. Developed by
 a team in Melbourne.
- <u>Muse</u> Freeform musical exploration in a relaxed environment. Floating through the ocean, or perhaps space, you simply enjoy the music and casually bring together a following orchestra of beautiful glowing entities and their sounds.