How People Are Entertained:

The Consequences of the 1983 Great Video Game Crash

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Preface

This article was written back in 2013 for an assignment for my first (and only) year of Computer Science at the University of Derby. The assignment asked that the article be 2-3 pages long and stringently follow the IEEE document standard.

As someone who can't stand Times New Roman (particularly at point size 12), I was never quite satisfied with what I submitted even when I was happy with the content I had written and the images I had found and provided.

So I have finally put this article where I believe it belongs; in a LyX document with attractive typesetting in a presentable serif typeface (Charis SIL) using knowledge I have gained afterward from book typesetting and eBook production.

I also wanted to fix up some grammatical mistakes, re-check the reference links and do some general fixes. So with that in mind I do consider this updated version of the article to be the superior version.

The original article I submitted was recently published and then released to the general public via the"Computers for Everyone" section of their"Open Journal Systems @ Department of Computing & Mathematics @ Derby" website. There are also plenty of other articles by fellow students who I shared with on my course, I recommend you read them too!
http://computing.derby.ac.uk/ojs/index.php/c4e/article/view/90/67

Article

Abstract

This document explains what led to the Great Video Game Crash in 1983. The main consequences will then be presented, in particular, the lockdown of consoles to unofficial games, and homebrew. Finally, the recent successful use of the open model will be briefly reviewed.

Index Terms

Atari, Video-Game-Crash, NES, unofficial, cartridges, open-console.

INTRODUCTION

The year is 2013, video games are commonplace and the industry as a whole seems to be prospering well (Gartner, 2013). It was not always smooth sailing and for a short while the entire games industry's future was put into question, after a 97% drop in market value in 1983 during the Atari era in the United States (CleverNoobs, 2013, 0:0:20; Electronic Games Magazine, 1985, pp. 30-31).

THE GREAT VIDEO GAME CRASH OF 1983

The name of this huge dent on the industry was The Great Video Game Crash of 1983. The name is used to describe the events that brought the market value down to such a low level. It was caused by multiple factors, which can almost be completely attributed to the Atari 2600's openness because anyone could make cartridges for the console.

The first step towards the crash happened in 1979 when a handful of disgruntled games developers working for Atari were unhappy that they were not credited for each game's development and that they did not receive royalties for each copy sold. Since Atari refused to alter their policy to fit the games developers' demands, they left the company to form the World's first 3rd party publisher, Activision (Activision, n.d.). This first step meant that not only did Atari lose talent but they gained competition. The console's openness meant that Activision could make and sell cartridges for the Atari 2600 without paying

any license or royalties back to Atari. This was not helpful to Atari at all and foreshadowed what was yet to come.

The second step was that Atari released some poor 1st party licensed titles for the 2600, both *Pac-Man* and *E.T. the Extra-Terrestrial* (E.T.) which were released in 1982. They were highly anticipated but badly received by critics and fans because they were full of bugs and glitches and not particularly fun to play. This was not helped by the fact they were both were rushed to completion and lacked quality assurance by Atari. Atari had spent a great deal of money in licensing fees for rights to *E.T.* and Pac-Man, and they got little financial gain from it when their customers realised that these games were not worth the investment (Giant Bomb, E.T.) (IGN, Top 10 Best-Selling Atari 2600 Games).

The third step was that many other companies were wanting to the ride the video game money train. Back in the 1980's, video games were the fastest growing industry in all the USA. Many companies including Quaker, Purina and Mystique all made atrocious games to capitalise on huge market. Though this effect pushed it down even further (CleverNoobs, 2013). With games like *Chase the Chuck Wagon*, *Name this Game* and, all created by these companies purely for profit over entertainment value.

The fourth step was that at the same as the Atari 2600 era was the birth of the affordable personal computer which could allow the consumer to both play games and be productive. Further adding competition to Atari's business because there were other machines on the market that could do multiple things for your money (CleverNoobs, 2013, 0.2.0). With all these terrible games out there and competition from the personal computer space, most consumers simply got tired and angry playing with console games. So enough consumers voted with their wallets and decided not to buy them. This caused the market to topple over and caused the 97% drop from $3.2 billion (~£2 billion) to $100 million (~£63 million) almost dooming it completely (CleverNoobs, 2013, 0:0:50)

Figure 1: Atari 2600 Console

Recovery of the Console

The market was almost down and out, consumers were immensely cynical of the words video game. If it was not for Nintendo, through some clever marketing tactics with the advertising of Robotic Operating Buddy (R.O.B), a peripheral for their upcoming Nintendo Entertainment System (NES) console the console gaming industry might not have ever been resuscitated back to its former glory.

The NES managed to bring the industry back on track, with Nintendo learning from Atari's mistakes in the past. Nintendo saw that 3rd party development for their console could be beneficial to their business, but it should be controlled with licensing (an agreement between the publisher and the console manufacturer) to ensure both quality control and enable Nintendo to profit off the games' sales. There were many successful 3rd party titles including *Tetris* (1989), *Teenage Mutant Ninja Turtles* (1989) and *Punch-Out!!* (1987). Nintendo did not rest on their laurels with just 3rd party content and began to release games of their own much like Atari did. Many of these games were the first entry to many loved franchises including *Super Mario Bros.* in 1985 (which itself was the bestselling NES game of all-time), *Legend of Zelda* (1986) and *Metroid* (1986). These were all well received by the audience and, subsequently, have received many sequels to this day.

Since the NES console was locked down due to Nintendo learning from Atari's main mistake of allowing oversaturation of content, games that were not

approved by Nintendo would be released unofficially as cartridges but would never receive the sales figures or critical attention that most official content would receive (IGN, n.d.). This included games that were not even submitted to Nintendo to approve because of content, a reluctance to pay licensing fees and a disagreement over licensing conditions. The unofficial cartridges would often look physically different to official cartridges and used techniques to bypass the 10NES authorisation chip that were present in official cartridges to ensure only official cartridges could be played (Horton K., n.d.). In fact, Atari under a subsidiary called Tengen, actually made unofficial cartridges for the NES as well as having their games officially released on the console under the Atari name (Oxford, 2005).

The console continued selling until the NES's successor Super Nintendo Entertainment System (SNES) arrived in the early 90's as the direct successor to the NES. While it sold less units than the original NES, it retained dominance over competition from Sega with their MegaDrive (Genesis in the USA) and other consoles. The console itself had full 16-bit capabilities bringing improved graphical and sound capabilities with it (Buchanan, 2009). Subsequent consoles would also be locked down and the consumer would be prevented from playing unofficial 3rd party content and using unofficial 3rd party accessories by the manufacturers, because it was a system that was proven to work for the console manufacturers (Chacksfield, 2010).

Whilst there were a few hobby consoles that were open to modification by the manufacturer, such as, the Pandora console by OpenPandora, and the Dingoo A320 by Dingoo Technology Ltd, none of these consoles took the Internet by storm like the OUYA did. The OUYA, which is a $99 (£99) microconsole using Google's Android platform, received $8,596,474 (£5,346,069) in funding with 63,416 backers via the crowdfunding platform Kickstarter in 2012 (Kickstarter, 2012). This suggests that customers had a great deal of faith in the concept of an open console. Furthermore the OUYA has recently celebrated its 500th game, that is, *Neon Shadow* (Tasty Poison Games, 2013). The OUYA is built on the foundation of being an open system where every game is free to try out with games available to purchase via digital distribution. In September 2013 Valve formally announced the Steam Machine, which is an open console backed by them which allows modification in a similar fashion to that of an ordinary gaming PC (Valve, 2013). The fact that Valve has invested in custom hardware for the Steam Machine itself, the controller and the operating system, implies that they have confidence in making profit from an open console.

This is most likely due to the extreme popularity of their digital distribution Steam. Steam (and most other digital distributors) solved Atari's issue back in the early 1980's, by managing quality control via a number of methods. For example, Steam Greenlight allows the opportunity for potential customers to vote for a game before it is allowed to be sold on the storefront.

Figure 2: OUYA Console

Figure 3: Steam Machine Concept

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