OnLine Case 4.1 NINTENDO'S RISE FROM THE ASHES

Introduction

This case on the Computer Games industry charts the launches of new products from the three suppliers who now dominate the industry, Sony, Nintendo and Microsoft. It describes a drive to push out the specification boundaries from two of the players and a quite different approach from the third. What would matter most – technical leadership or the best gaming experience?

By the early 2000's the industry, computer games consoles and the games themselves, was worth US$30 billion worldwide. Rivals need both consoles and games if they are to succeed; the leaders all provide their own games and they all rely on independent games developers as well. When new consoles are launched many games are 'backwards compatible' – games designed for the previous generation can still be used on the latest version.

When the industry developed the leading producers were Sega and Nintendo. Sega would eventually stop making consoles and focus on games; Nintendo was always particularly strong with hand-held consoles, but these are sold at lower prices than the home consoles that link to a television screen. Sony entered the industry in the early 1990s and its PlayStation 1 was quickly popular. When this was replaced by the PlayStation 2 Sony was the clear market leader. It also produces hand-held machines. Microsoft invested very heavily to buy into the market and launched the X-Box, which has perhaps never quite achieved what was really hoped for it by its manufacturer, although it was able to match sales of Nintendo's rival home console, the Game Cube.

When the first of these 'seventh generation' products reached the market the publicity for one game, Test Drive Unlimited from Atari, said: *Sunlight glints off alloy wheels; trees are reflected on tinted windows; palm trees sway gently in the breeze. It is hard to tell this is not a film of an actual test drive.* The game allowed users access to 2000 square kilometres or roads in Hawaii, mapped realistically from digital satellite images.

Welcome to the seventh generation

The early years of the twenty first century would see Microsoft, Sony and Nintendo all launch new products. At the end of the sixth generation the Sony PlayStation was utterly dominant but Microsoft had invested heavily and taken a minor share with its first X-Box. The successor to this, X-Box 360, would be the first seventh generation machine and enjoy a considerable time period as the only new console available. It would enjoy at least a twelve month lead on the new PlayStation. Sony would be the last to market. Its PlayStation 3 would be extremely highly specified – with the equivalent power to that of full-sized supercomputers from a few years back - but this would cause design and production problems that slowed down the launch. The PS3 can do 1000 billion calculations per second. Inevitably it sets new standards in graphic detail. Many commentators wrote that the battle would be between these two

heavyweight rivals as they tried to outspend and out-design each other. Few expected Nintendo – who pledged to remain 'committed to gaming basics' - to be the competitor that would ultimately claim the headlines with leads along the lines of *Nintendo Wii's all over Sony.*

All three machines would be attractively designed – the first X-Box had been criticised for being relatively bulky and unattractive. The X-Box 360 would stand upright, and in this respect be similar to the modern desk computer. The edges would all be rounded rather than at right angles. PlayStation 3 would be slimmer and flatter and it could be set up either vertical or horizontal. The Nintendo Wii has the looks of a square edged upright flat box standing on top of a slightly wider base. All three looked different as did their remote controllers.

The major differences lie in the technical capabilities. Both X-Box 360 and PS3 play video discs, audio and music DCs as well as DVD videos. The Wii only offers the last of these. The PS3 was designed so that all PlayStation 1 and 2 games could be used; Nintendo games from years past would all work on the new the Wii. For the 360, 'some' – actually only a few - X-Box games would be OK. All three consoles had a WiFi capability and an Ethernet port, but the Wii's is the least sophisticated. For the first time, Microsoft was promising the most games in development in time for the launch.

The X-Box 360

The X-Box 360 has double the power of its predecessor and it is five times as fast. Launched in November 2005 in the US and UK (December in Japan) it was available for Christmas. It was available in the UK for either £210 or £280, depending upon the actual specification. The expensive version is for the true enthusiast; the lower price for those happy with budget games. The lower spec machine was US$400 in America. The 360 came with a free basic access service to Microsoft's on-line gaming; at this time there were 2 million active members around the world for this service. Games could be bought on-line, downloaded and stored in the 360's powerful memory. The product was targeted at Microsoft's main audience – 16-26 year old serious enthusiasts who spend at least ten hours every week playing.

But, as had happened with the original X-Box, early shipping targets were missed because of a shortage of components – the machine has 1700 discrete parts, although some of them are used in digital cameras, video cameras and MP3 players. Microsoft was anxious to own the intellectual property rights to the key components and that limited which suppliers they could partner with. Intel was reluctant to deal, but IBM agreed. 18 new games were offered with the launch. Some others were ready but deliberately held back until the machine was better established in the market.

In March 2006 Microsoft announced a direct link with a new children's television programme, Viva Pinata, where children create their own living garden with plants and animals. It was the first time Microsoft had created intellectual property across multiple mediums.

Around this time, and perhaps very significantly, Microsoft acquired Massive Inc., a New York-base company that places advertisements in on-line video games. By March 2007 the number of subscribers to Microsoft On-line had tripled to 6 million.

But in summer 2007 there was a high incidence of product recalls – repairs were required. Affected customers were provided with a free three-year warranty. The estimated cost to Microsoft was US$1 billion. At the same time the machine prices were reduced. Having just reached a break-even point the company deliberately started selling at a loss again. The basic model was reduced by the equivalent of $50. Why? Monthly sales had started to fall, partly through competition and partly through the quality problems.

PlayStation 3

Although X-Box 360 completely replaced the X-Box, PlayStation 2 would continue to be available, albeit at discounted prices, long after the PS3 launch. They were genuinely different machines. The PS3 makes use of two radically new technologies, the Cell Processor (a chip for processing digital media in real time and designed in partnership with Toshiba and IBM) and Blu Ray (Sony's high definition DVD format, and a rival to HD DVD which has lower storage capacity). The Cell Processor is key to the immense speed and power; Blu Ray dictates the superior graphics quality. Quite simply, with PlayStation 3, Sony set out to create the ultimate home entertainment hub.

The Cell Processor is actually eight linked processor chips, seven of them active at any one time and one backing up. These chips share out the computing load. It is incredibly powerful and way beyond other games consoles. It allows television sets to receive and manipulate data from a variety of separate sources – after all, all the 'boxes' in a home entertainment systems have to be able to talk to each other!

With Blu Ray, Sony had support from Dell, Hewlett Packard, Twentieth Century Fox and Disney Corporation. Microsoft inevitably linked with Toshiba's HD DVD, which was also supported by Sanyo, NEC, Universal, Paramount, Dreamworks and Warner Brothers, although the latter also had links to Blu Ray. Although it has been generally assumed hardware would eventually be able to accommodate both formats, this was not the case at the start. Despite Sony's generally excellent track record, the consumer choice many years back to prefer the VHS video format from JVC to Sony's technically superior (but more expensive) Betamax would be part of the company's folklore.

Regardless, Sony could not escape the reality that both of these new developments present manufacturing challenges that would cause analysts to question Sony's ability to supply PlayStation 3 in large numbers from the outset, especially if demand took off faster than anticipated. Sony knew that many people would be tempted to buy a PlayStation 3 for no other reason that to get their hands on a Blu Ray DVD player! Plugged into a large screen television set the graphics are generally acknowledged to be stunning. The launch price strategy would be critical.

The PlayStation 3 offered huge promise – technically it would be superb. It was, then, a huge setback when, in March 2006, Sony had to announce a six month launch delay. The X-Box 360 was already available worldwide and Sony was having problems with Blu Ray. The earliest promise now for shipments of PS3 was November in the US and March 2007 in Europe.

The target price for the basic machine in the US was US$499 (with a higher specification version available for $599) and in Europe £425. Sony was not trying to match its rivals. When the launch finally happened, it was relatively low key – certainly less of a fanfare than had been the case with Sony's earlier consoles. Supplies were restricted. Allegedly fans were disappointed with the launch games available – there were 21 (7 dedicated and 14 multi-platform) with 14 more in the pipeline. By this time Microsoft claimed to have sold 10 million X-Box 360s and its games probably had the edge over Sony. The Nintendo Wii provided 31 new games.

When PS3 was launched the lower price Nintendo Wii was also available and Merrill Lynch predicted that by the end of 2007 X-Box 360 would hold a 39% market share, followed by Sony with 34% leaving Nintendo with the remaining 27%. Sony had a lot to do to reclaim its dominant position.

Almost inevitably there were teething problems and users had to download free software upgrades over the internet. Other upgrades would be hidden secretly on games discs. Simply, some PS2 games were not playing properly on the new consoles. In some cases the problem was the music, in others the graphics movement.

Lessons from the launch

Much was written about the development and launch problems encountered by Sony and these can be summarised as follows:

1. It is risky to become very focused on new proprietary technology – after all, does the 'average user' need or even want the power available?

2. It makes sense to be recognised for doing one thing well. Nintendo had concentrated on the gaming experience. Sony's PS3 was more about a lifestyle with lots of activities available through a home entertainment system.

3. Being last to market and, in the process, dampening customer expectations must be a mistake.

4. Similarly being the most expensive competitor must work against a company – unless there is a real preference for its superior product.

5. Finally, it is never wise to disappoint expectant customers. Sony was demonstrating PS3 with dazzling performances at shows through the summer of 2006, but the product launch was still six months away. Interestingly Apple has recently adopted a strategy of only announcing products when supplies are ready to ship.

On the face of it, Sony got it wrong. Demand did not take off as rapidly as had been the case with PlayStations 1 and 2. Nintendo was doing well with a completely different approach and business model. Was Sony right to persist with its argument that in the end the superior technical product would ultimately win the day?

A Sony fight back?

To its credit Sony did not walk away from the challenge. In March 2007 it announced and demonstrated 'Home', a virtual world similar to Second Life – but with far superior graphics. The full launch would be in the autumn. Three dimensional characters can furnish their own apartment, mount their own photographs or pictures on the walls, talk to their friends (using voice and text messaging), play pool in their games room, and go out to a bowling alley and games arcade. The package includes a virtual cinema which they can visit on line with their friends. Home is a free download for a basic access, but then enthusiasts pay for the extra services. Sony was always aware of the advertising potential.

But newspapers reported that in April Sony was seriously debating price cuts to 'ignite sluggish demand' in Japan and the US. Reductions of $100 did follow. But in Europe demand exceeded supply and the products available were selling. Because of the technology and the production costs every console was being sold at a loss. The component cost of every Cell Processor is US$230 and every Blu Ray player $350. The new console had incurred huge developments costs and the recovery targets for recouping this investment were not being met.

Also in April Sony announced the forthcoming retirement of Ken Kutaragi, the 'maverick engineer' credited with the design of all three PlayStations. Was he carrying the can for a disappointing launch?

Sony received one interesting and perhaps unexpected endorsement in October 2007. In the run-up to the final Formula One Grand Prix in Brazil title-contender Lewis Hamilton confirmed he was preparing for the 'race of his life' on his PlayStation. The software was just as good as the official simulator in preparing him for the challenges of the circuit.

In the run up to Christmas 2007 Sony launched a new model of the PlayStation 3 designed to boost sales and allow it to reach its new target of 11 million consoles sold by March 2008. Sony had 'shrunk' the Cell Processor and reduced the size of the graphics chip to shave costs. It was hoping to reduce production costs by up to one third and help restore profitability to its now loss-making games division. Sony was also working hard to provide a better service to its games developers who were finding aspects of the PS3 complex to deal with. At the same time there was a boost in sales when it became obvious there was a shortfall in supplies of the Nintendo Wii, for which demand was outstripping both sales predictions and supply capability.

But 2008 saw a change of fortunes. In February Toshiba abandoned its HD DVD format; BluRay had prevailed And a PlayStation 3 is the cheapest way to buy a BluRay player.

The Nintendo Wii

In contrast to Microsoft and Sony, Nintendo is a focused gaming business. It is not diversified. Although it has long been the market leader for hand-held gaming machines, it had arguably lost its way in the home console sector. In households where the Nintendo Game Cube could be found it was often 'the kid's machine'. Older teenagers and parents had a PlayStation or X-Box as well.

In 2002 Nintendo's strategic leader, a 74 year old veteran called Hiroshi Yamauchi, stepped down. To many he had been the creator of the computer gaming industry and instrumental in creating Super Mario and Pokemon. His successor would be 42 year old Satoru Iwata. His challenge was to revive the company's fortunes.

Nintendo's games were perceived to be inferior to its rivals. The characters upon which they were based might be strong and valuable, but the games lacked an edge. The characters deserved better exploitation. Nintendo had stayed focused on youngsters under 17, whilst its rivals had benefited from the increasing popularity of gaming amongst older customers. There was little opportunity to make any inroads with the sixth generation series – Nintendo had to come up with something radical if it was to be a major player in the seventh generation. Its choice in a way was simple – did it look for its innovation to be based on hardware, software (games) or the overall gaming experience? Which market segment should it target? Could it surprise everyone?

By 2005 sales and profits were flat and disappointing. The company was not yet in financial difficulties, but it was not seen to be going anywhere significant. Iwata's declared approach was to not invest huge money in new hardware development (which is difficult to recoup quickly, if at all) but to focus on 'creating new and exciting game play'. His argument is that user experience is heightened not by ever-better graphics but by increasing the fun. In the event, Nintendo would surprise many people when it launched the Wii in time for Christmas 2006. Computer games console sales would thrive in 2007 and the boost would be more down to Nintendo than either Sony or Microsoft.

Why 'Wii'? Nintendo stated that 'Wii sounds like 'we' and emphasises the console is relevant for everyone. It is an easy-to-remember name in any language'.

Described as a 'new gaming experience' the Wii is a less sleek design that either of its main rivals but it set out to be 'pure fun'. The key difference lies in its motion sensing controller which, amongst many other things can be swung to replicate a bowling ball being released. There is a games accessories pack – including a tennis racquet which can be swung to replicate a tennis stroke and a golf driver for simulating a golf shot. Sometimes the controller senses contact with a ball; sometimes it is necessary to press a button to activate a contact or a ball release. There is also a gun pointer console. The main controller is held and manipulated much like a car steering wheel.

The Wii was launched at the relatively modest prices of US$250 and £180. 30 games could be downloaded in addition to the 31 available for purchase. It was instantly popular, and demand quickly outstripped supply. It was soon outselling X-Box 360,

despite the time lead this product had, and it was well ahead of PS3. In a strange irony, it was selling at around the current levels for PlayStation 2. Units were changing hands at premium prices on auction sites. There were some glitches though – some users complained that they had lost hold of their controller and smashed their television screens!

Analysts continued to argue that Wii could not win in the long run – technology would ultimately win the day. Microsoft would come to dominate the US market and Sony the Japanese. Europe remained harder to call. For all that, in mid-2007 the market capitalisation of the very focused Nintendo exceeded that of the much more diversified Sony. Sony's turnover remains eight times the size of Nintendo, which employs just 3000 people in comparison to Sony's 160,000. This data offers some insight in to the significance of computer games!

In June 2007 Nintendo, which has long concentrated on producing its own games (based on trademarked characters), said it would make it easier for independent designers to access the Wii by releasing key software – but not until 2008. It was really hoping to strengthen its on-line portfolio. Early in 2008 it was announced that the BBC and Nintendo had struck a deal. The Wii is broadband enabled and it can be plugged into a television set and used to download and replay leading BBC programmes through its iPlayer option.

Why had the Wii been so successful? There were a number of reasons:

First, Sony and Microsoft targeted 18-35 year old males predominantly. Nintendo knew it had to break its dependency on children and it targeted the growing female buyers. One theme was to 'get the Wii out of the bedroom and into the living room' where all the family could play with it. Interestingly, in the US 1 in 8 men use a Nintendo DS, often for 'brain game' challenges.

Second, it had a clear price advantage.

Third, it focused on the gaming experience and this proved to be an attractive proposition. 'The Wii is different but it doesn't set out to blind people with technology'. Many of the games take only a limited time to play – they don't require a massive time investment.

That said, the price advantage may well be eroded over time, and the gaming edge will not be a permanent advantage. On the other hand, maybe consumers will continue to buy Wii's in significant numbers even if they choose to buy an X-Box 360 or a PlayStation 3 as well.

To reinforce its innovative thrust, in July 2007 Nintendo launched its brand new and very creative balance board. The board lies on the floor, not unlike the weight scales found in most domestic bathrooms. It senses a person's balance and uses this to drive a range of aerobic games. One can soon imagine how it can provide a skateboarding or a snowboarding experience in a very safe environment. But it also allows someone to rotate their hips as if they were balancing a hula-hoop; the screen graphics demonstrate just how well they are doing. Similarly users can jog on the spot and check on their screen just how well they are doing in a particular race or fun run. They

can control the overall speed of the run and speed up or slow down as they wish. It is therefore serious exercise in a fun environment. Its designer is said to have a 'genius for taking his hobbies and turning them into games'.

In summer 2007 one press article started with the claim that 'the Wii has become the fastest selling games console in UK history'. It hit the one million mark in 38 weeks, eleven weeks quicker than had been the case for PlayStation 2 – and 22 weeks faster than X-Box 360 a year earlier.

But is this momentum sustainable? Is Nintendo going to seriously replace Sony as the market leader? Are those critics who say the Wii's life cycle will reach maturity (and decline) relatively quickly going to be proved correct? Can Nintendo prolong the life cycle with innovative games? Will Sony's strategy of focusing on leading edge technology turn out to be the powerful business model the company believes it to be? And what of Microsoft? The X-Box 360 was designed to out-sell the PlayStation 3, which so far it has done. But neither Sony nor Microsoft seemed to factor in that Nintendo would return the very basics of computer gaming and take both of them by surprise.

By May 2008 the PlayStation 3 was outselling the X-Box 360 in Europe, even though the X-Box is considerably cheaper and had 16 months to embed itself ahead of the PS 3 launch. Sony had now sold 5 million of its new console in Europe, where it is particularly strong, and 10 million worldwide. Microsoft had sold 18 million X-Box360's and Nintendo had sold 25 million Wii's. In the UK the PS 3 continued to cost £300, with the X-Box priced at £160 and the Wii at £180, typically. Sony confessed it had perhaps been wrong to market the PlayStation 3 as an all-purpose machine and it would in future market it as a games console first and foremost.

In 2009 it became clear both Sony and Microsoft were looking to launch upgraded consoles and games using motion-sensing technology. They would both use cameras to sense movement rather than the wand technology favoured by Nintendo – who in turn commented that they had rejected such technology as too complex. There was already some concern that Wii's popularity might be peaking – it was great fun for casual gamers but less challenging for serious gamers for whom Sony and Microsoft had better software propositions.

Questions   Why was Nintendo so successful with this product launch? What are the lessons in competition for other organizations? Do you believe Nintendo can sustain this lead? Will Sony return to a position of leadership? Is Microsoft always going to be a 'runner-up'?