THE SONY PLAYSTATION 2

The video games industry comprises both hardware (games consoles) and games software, much of it dedicated. This case discusses the rapid growth of Sony's first video games machine in the mid-late 1990s - and which quickly became a major contributor to Sony's profits - and the launch of its successor, PlayStation 2, in 2000. The launch was affected by temporary supply chain problems. This case looks at the possible impact of the Nintendo GameCube and Microsoft's X-Box, both due for launch in November 2001.

This case was written by John L Thompson in 2001 from a variety of published sources for the purposes of class discussion. It should not be taken to reflect either effective or ineffective management.

INTRODUCTION

Late in 2000 Sony was unable to satisfy the early demand in both the US and Europe for its new PlayStation 2 video games console. It was experiencing internal supply problems of critical components, a real setback in the run-up to Christmas, the peak sales period. The innovative Sony has typically striven to bring its new products to market as quickly as possible, laying it open to criticism that it will not get things 100% right. One rival, Sega, seized the opportunity this created to promote its newest model, the Dreamcast. The other main competitor, Nintendo, planned a new model launch in 2001. Microsoft was also planning to enter this market for the first time in 2001.

In 1994 Sony had been a 'non-entity' in the video games market - but by 1996 it was the world leader of this fast growth market. At the end of this year Sony's accumulated sales of 12 million games consoles was well in excess of rivals Sega (7 million) and Nintendo (4 million). Later in the 1990s the PlayStation - together with sales of the complementary games software (now mainly on CD-ROM) - was contributing 40% of The Sony Corporation's operating profits. It was estimated that the delay with PlayStation 2 could halve the Sony Corporation's profits in 2000/01.

THE COMPUTER GAMES INDUSTRY

Global spending on video games - games console hardware and the associated games (software) - exceeds that spent at cinema box offices and is double the video rental market. Annual spending world-wide amounts to some \$20 billion (£14 billion) - the UK market exceeds £1.5 billion. In a five year period at the end of the 1990s UK customers bought over 150 million games, the equivalent of six for every household. Software comprises around 70% of the total market, emphasising the importance of popular games. Without complementary, first-rate games a console will not find popularity in the market place. Many games are developed by independent software companies, rather than by the hardware manufacturers themselves, and more are available for the Sony PlayStation than are available for any of its rivals. The average

price of a game in the UK is £35.00. Some games are dedicated to a particular console, whilst others are available for use on different consoles. It is, therefore, essential that the consoles are designed in such a way that software suppliers can exploit their features and advantages without undue difficulty. In addition, there are a number of dedicated magazines - the official PlayStation magazine in the UK sells over 350,000 copies of each issue.

Whilst a number of games can be played on a personal computer (PC), the market is dominated by games consoles. The market leader for hand-held, portable consoles (which, for example, can be used in a car, train or plane) is Nintendo - its Game Boy, launched in 1990, has sold well and consistently. Games console which are coupled up to a domestic television screen comprise a larger section of the market, and this is where Sony has become dominant. The core market, where hand-held consoles are especially popular, is the under-20s, but people of all ages are games players. The popularity of a game is often measured by the number of hours that people will play it, often in a single stretch. Does it keep people awake into the 'early hours', for example?

In 1999, before the launch of the second, improved, PlayStation, Sony had a 77% global share of the market sector in which it competed - Sega had 12% and Nintendo 11%. Sony is particularly dominant in Europe. When hand-held consoles were included, Sony had provided 66% of all consoles in homes world-wide. It had achieved this dominance in an already strong market in just a few years.

In recent years, the sales value of games has fallen off marginally - whilst unit sales have continued to grow, there has been an increased preference for budget-price games. As new hardware comes onto the market, one real issue is whether this is what the market needs to stimulate real growth. Does it not also need truly new games that are unlike those that have preceded them rather than improved versions of existing ones?

Computer games have been around in various guises for many years. Silicon Valley's Atari gave the world its first PC video game in 1972 with Pong, an addictive game of electronic table tennis. 200,000 copies were shipped in the first year alone, but the craze was over in two years and Atari was in trouble. It was later acquired by Time Warner. During the 1980s two Japanese electronics companies, Sega and Nintendo grew to dominate the market, exploiting the popularity of games featuring characters they invented. Sega's Sonic the Hedgehog and Nintendo's Mario were the most notable at this time. Over time 8-bit machines were replaced by 16-bit machines.

THE FIRST PLAYSTATION

When the market was opened up properly by Sega and Nintendo Sony expressed no manifest interest in following them. This was changed by chance. Shigeo Maruyama, a Vice President of Sony Musical Entertainment (SME), the division which controlled the movie and music businesses, won a Nintendo Super Famicom games machine at a party. He started playing with it and became hooked. The short-term outcome was a division in SME - Sony Computer Entertainment, SCE - dedicated to producing

games software for Nintendo. At this time Sony's consumer electronics division was also supplying Nintendo with sound semiconductor chips. Nintendo's Super Famicom depended upon games cartridges - Sony's engineers mused about the possibility of a superior cd-rom alternative. It was this interest that provoked the first cartridge-based PlayStation - or PlayStation 1 as it ultimately became known.

Sony realized that, for once, it would be entering an established market and knew that its product would have to offer some new value, something clearly different. The PlayStation was a 32-bit machine, faster than its predecessor 16-bit rivals. It was backed by a number of high quality games. Interestingly Sony opted to play down the Sony corporation name and emphasise the PlayStation brand. Its consoles would not be sold through Sony's normal consumer electronics retailers but at discount stores and video games outlets, where the typical customers would expect to find them. Not surprisingly Sony's existing retailers were incensed, but executives at SME were determined and stood firm on this issue.

The PlayStation 'package' comprised the basic games console, a number of dedicated Sony games and several licensed games designed for Sony by specialist games software companies. Eidos, for example, supplied Sony with the hugely popular *Tomb Raider*, a game where heroine Lara Croft is hired to recover pieces of an ancient artefact and must overcome a series of traps and challenges from wolves and dinosaurs. Over the years several million pounds have been spent developing and improving the game, and in 2001 a feature film was spawned. Whilst computer animation is a vital feature, the film uses real actors. Historically it has been more likely for games to be developed from movie characters.

The basic price of the console (at its launch) was \$300 in America, £300 in the UK and this equivalent in the rest of Europe. The cost of each game was around £40 minimum. The console prices soon came down as the market grew - Sony, like its competitors, knew the real profits came from subsequent software sales and was happy to cross-subsidize a relatively low-priced console. Of course, Sony was also enjoying cost savings through the experience (or learning) curve effect and was happy to pass these on to consumers.

The success of The PlayStation 'exceeded all Sony's expectations' - for a number of reasons.

- Sony was able to derive synergy from its competencies in both hardware and software. Its knowledge in electronics technology had been developed over many years; through Sony Music Entertainment it had developed valuable know-how in the marketing of software.
- Sony timed the launch carefully and entered the market just one month after Sega launched its new Saturn console, the first 32-bit machine. This suggested that the real competition in this sector of the industry lay between Sony and Sega, rather than with Nintendo as well, although in 1997 Nintendo launched its 64-bit N64.
- Its pricing strategy for consoles.

A number of attractive licensing deals which helped it build up a strong portfolio
of games from the outset. A number of key games software companies were
persuaded to switch their allegiance to Sony.

The growth of PlayStation 1

The first PlayStation was launched in Japan in December 1994 - within six months sales of the console had exceeded 1 million.

By September 1995 the console was available in the US (at \$299.99) and Europe (at £299.99). In May 1996 these prices were reduced by \$100 and £100 respectively. When, late in 1996, cumulative sales reached 10 million consoles, 4.2 million had been sold in Japan, 3.45 million in the US and 2.35 million in Europe.

In March 1997, prices were reduced again - in Europe to £129.99. At this time some 100 million PlayStation games had been sold world-wide. This number had reached 200 million by the beginning of 1998. Nintendo launched the first 64-bit console in 1997.

In August 1998 prices were reduced yet again - to £99.99 in Europe. At the end of the year some 50 million consoles had been sold. The price fell to £79.99 in September 1999.

PlayStation 2 was launched in Japan in March 2000 - followed with launches in the US and Canada (in October) and Europe, the Middle East, Africa and Australasia (November). A portable version of PlayStation 1 (PS One) was launched in Japan in July 2000 and the rest of the world in the Autumn. This involves an attachable LCD screen for the existing console, but it needs an adapter which plugs in to a car's cigarette lighter - the Nintendo GameBoy operates from batteries.

By Summer 2000 PlayStation 1 console sales topped 75 million - with 630 million units of games software.

GAMES SOFTWARE

Games are categorised into 5 main types.

- Adventure/strategy games which comprise 24% of the market and involve a number of variants, including many where players compete with other people
- Driving/motoring games and simulations 20% ranging from motor racing to simulations of outdoor terrain driving
- Sports 17% where, for example, players can play football against the best teams in the world or play a round at the world's most famous golf courses etc.

- 'Beat em ups' fight based games 12%
- Platform games 12% so called because the hero character, such as Lara Croft, moves from platform to platform in the game, which can be played in discrete parts.

Character games have always been more popular with Sega and Nintendo than with Sony. Nintendo has earned substantial revenues in the 1990s from its series of Pokémon games. Sega and Nintendo have always developed their own games, whilst using outside suppliers as well - inventing Sonic and Mario respectively. However, the world's leading games supplier is Electronic Arts (based in the US) which specialises is sports games. The largest in the UK, Eidos, which relies on Tomb Raider, but has a number of other games, had a turnover of £226 million in 1999.

In 1999 Sony had 90 companies developing games for PlayStation 2 and was determined that 50 new games would be available for the launch, far in excess of any previous console launches. Sony's strategy has always been to dominate the software shelves. Where suppliers develop games that will be available for more than one console, Sony typically looks for staggered launches, ensuring it enjoys a lead.

Sony's most valuable game has been Grand Turismo, developed exclusively for the PlayStation by Polyphone Digital, a subsidiary it owns. 16 million copies were sold of the first two versions - GT 3 was launched in 2001 after three years development. This version features 15 motor racing circuits and includes a simulation of the Le Mans 24 hour race, which is played for this length of time. Sony has been granted licenses by 44 manufacturers to feature their cars, and by over 100 manufacturers of tyres, brakes and other components. Gran Tursimo 3 allegedly uses the features of PlayStation 2 better than any other game. All the different engine noises can be distinguished. The sun glares on the car windscreens; and heat shimmers off road surfaces. It is priced at £40.00 in the UK.

Although certain games are popular aound the world, others have a more local appeal. Some games that are successful in Japan are not on sale in the UK and US. Japanese youngsters have arguably less free play time than their European and American counterparts and, for this reason, games which can be completed quite quickly are popular.

PLAYSTATION 2

PlayStation 2 is a 128-bit machine, but it was not the first 128-bit machine on the market. Sega's Dreamcast was launched in 1999. Dreamcast included a free modem and had Internet access. Although initial sales were strong, they were sluggish by 2000. Arguably customers were aware that PlayStation 2 was imminent and were prepared to wait.

The graphics on PlayStation 2 are of 'cinematic quality' and the console has a DVD reader which can run movies. Because DVD players are relatively more expensive in

Japan than in the US and UK, some people were thought to be buying PlayStations just to run DVD movies. In the end some 30 completely new games were being made available for the American launch, more than would normally accompany a new console. Some designers had commented that PlayStation 2 was not an easy machine to work with. Dreamcast was not offered with a DVD player. PlayStation's hard drive would later be able to accommodate an Internet connection and allow users to buy games over the Internet and download them directly on to their machine. In addition, PlayStation 2 was backwards-compatible. Buyers would be able to use all their existing PlayStation 1 games, which would now have their graphics automatically improved.

Launched initially in Japan in March 2000, PlayStation 2 sales had reached 3.5 million by the Summer. Sony was hoping to achieve world-wide sales of 10 million by March 2001. Sony did in fact achieve this, and set a target of 20 million units for the next 12 months.

When the PlayStation 2 console was launched in America, however, just 500,000 were available. The intended number had been 1 million units. However the half million was still five times as many as had been available when the first PlayStation was launched. Sony's 20,000 retailers had to be rationed. The hope was that 100,000 more units would be available every week in the run up to Christmas, when 50% of the year's sales take place. On-line sales were postponed.

Sony owns one dedicated PlayStation outlet in San Francisco - and here the queues began to form some 24 hours before the launch time. Many incidents were reported as people became desperate to get hold of a console. Outside one independent retailer, for example, two men attacked a mother and her child with baseball bats before stealing the one they had just bought. In the UK a special pre-ordering system (with a paid deposit) was set up for the 20,000 consoles that would be available in November and December. Demand was estimated to be two to three times the likely supply. Sony was experiencing a real marketing dilemma - how actively should it promote the new model? Some excess demand can be healthy and add value to a product, but truly frustrated customers are a potential disaster. The price in America was \$299 and in the UK, £299. A secondary market soon opened up on e-Bay with prices in excess of \$400. UK 'black market' prices of £1500 were reported.

The problem was a shortage of key components. Sony were reticent to provide comprehensive information, but the speculation was production yield problems with the critical graphics synthesizer.

SONY'S DILEMMA

Sony was anxious to achieve a strong position in the market by the Spring of 2001 - in order to consolidate its position as world leader in an uncertain competitive environment. Sony accepted it might have to consider early price reductions after Christmas to try and maintain the growth momentum. Even if this meant selling at an initial loss, this may not be a major headache as most of the future profits would come from games rather than the actual consoles.

Sony knew that Nintendo was planning to launch its new 128-bit GameCube console in 2001. It was, perhaps, more concerned with the uncertainty surrounding the entry of Microsoft into the video games market. Microsoft had realised that games consoles were far more significant than PC-based games and did not want to keep missing out on this market opportunity. Bill Gates was planning to launch his X-Box with a promotional budget of \$500 million spread over the first 18 months. The X-Box was known to be a powerful machine (its graphics chip was rumoured to be three times as fast as the one in PlayStation 2) and one that was popular with games developers because it used the familiar Microsoft PC architecture and offered top quality graphics. It was unclear whether the X-Box would simply compete with Sony, Sega and Nintendo for the 'existing' market or whether it would stimulate the whole games market. X-Box is due to be launched in the US and Japan in November 2001. Europe must wait until 2002. Nintendo's GameCube, an unusually-shaped square purple cube, will also be launched in Japan in September 2001, in America in November 2001 and in Europe in 2002. The anticipated American launch price for the GameCube is \$199, which again implies that Nintendo is selling it at a loss.

Microsoft has sub-contracted production of the X-Box to Flextronics of Singapore, and it will be manufactured in three places - as well as 'somewhere in Asia', in Mexico and Hungary. It utilises many generic components, and it features four ports (instead of the more traditional two) so four people can play a game at the same time. To make this easier, the connection leads have been extended from two metres to three metres. X-Box has an in-built hard disk but it's DVD drive is remote. Sales of 100 million units in the first 5 years would be 'cool'. Between 600,000 and 800,000 will be available for the launch, and it is anticipated sales will amount to some 1.5 million by the end of the Christmas period. Priced at \$299 in the US, this implies a loss of \$125 on each console. A host of software suppliers have been signed up, including Electronic Arts. The target is 20 titles ready when X-Box is launched.

When Sony was struggling with the launch of PlayStation 2, Sega saw a window of opportunity open up. Marketing of the Dreamcast was changed to try and capitalize on Sony's problems. A DVD player was added to the package and the price aligned with that of PlayStation 2. Advertisements included the comment: *Our deepest condolences to Sony on their PS2 shipping difficulties*. There was no availability problem and retailers were happy to build up their stocks. They believed there was a real chance that some customers would switch to a Dreamcast if their intended first choice PlayStation was not available. However, in January 2001, it was reported that Sega, pioneer of this industry, planned to come out of games consoles and focus on games software, which it hoped to provide for Sony and Nintendo. At this time, Eidos (*Tomb Raider*) also announced its profits were being affected by the delay with PlayStation 2.

FUTURE PROJECTIONS

Historically the winning competitor in a distinct phase of the computer games industry has not gone on to dominate the next phase. Sony was determined to change this pattern and hang on to its leadership.

Analysts generally agree it can do this, but with reduced power. Approximate market share predictions show Sony retaining around 50% of the European market, 45% in Japan, and 35% in America. Microsoft might achieve 30% in America and Europe, but less in Japan, where Nintendo enjoys its strongest sales.

Screen Digest has predicted the following console installations, in millions of units, at the end of 2004.

	PlayStation 2	GameCube	X-Box
America	18.1	15.5	15.0
Japan	12.3	9.5	5.3
Europe	15.7	6.5	10.9

Source: Financial Times, 26 June 2001

These projections imply that on an annual basis PlayStation 2 will be outsold by its rivals. It is also predicted that PlayStation 3 will be launched in time for Christmas 2004, possibly changing things again.

QUESTIONS

- 1 Why was Sony's PlayStation such a successful new product for the company?
- **2** Evaluate Sony's marketing strategy for the PlayStation consoles PlayStation 1 and PlayStation 2 and the accompanying games.
- **3** Given the changing nature of competition in the industry, what strategies would you recommend Sony follow in the next few years?