

The Sony Corporation

Sony, which will be 60 years old in 2006, became renowned throughout the world as an innovatory, pioneering company with an international presence and reputation in the consumer electronics industry. Sony is now an acknowledged leader in a number of very competitive and dynamic industries where no single company enjoys a dominant market share. Sony has always sought to develop unique products rather than copy other companies. Although profitable, profitability per se has not been the driving objective. Sony has invested in research and development at a rate above the average both for its industry and for Japan. Technologists are seen as a critically important resource and allowed freedom to work within relatively open-ended briefs. However, the company has come under enormous pressure as it has struggled to remain a leader in the changing world of consumer electronics and, as a result, there have been major changes in its strategies and structure in the 1990s and again in the early 2000s. This case traces the growth, development, successes and setbacks of The Sony Corporation. It encapsulates issues of corporate and competitive strategies, structural evolution and the the Japanese style of management. Sony's strategy of diversification into the American entertainment industry is examined in detail. The case deliberately stops short before the Sony PlayStation was launched, taking Sony in a fresh direction, and consequently does not deal with the subsequent growth of DVD technology.

This version of the case was written by John L Thompson in 1996. It is for classroom discussion and should not be taken to reflect either effective or ineffective management.

Introduction

Sony was at a critical point in its development as a global corporation as it celebrated its fiftieth birthday in 1996. The success of recent strategic changes is likely to have a major impact upon whether Sony restores its lost prosperity or declines to become a business legend.

The increasing significance of computers and communications equipment in consumer electronics, reinforced by the continuing convergence of computing, telecommunications and electronic entertainment in a range of new multimedia products, has forced consumer electronics companies such as Sony to focus their thinking and research on emerging technologies rather than concentrating on the innovatory development of new product variants. The conventional audiovisual products which have been at the heart of Sony's growth and development are now overshadowed by the latest developments in multimedia technology. To compete effectively in the late 1990s, Sony realized that it had to transform itself from a company which was dependent on the analogue technologies of conventional audiovisual products to one with competencies in digital technology which it could use to develop a range of new products for the multimedia age.

History and product developments*

Humble beginnings

Sony Corporation, begun in Japan after the end of World War II, is much younger than its major Japanese rivals. In 50 years it has become established as a market leader in the production of specialist electronic products in an environment of rapid technological change, economic growth and a global willingness to accept new technology.

Sony's corporate history has been built around core competencies in technological innovation and miniaturization and the development of quality products and quality systems which have led to high levels of differentiation. Early growth was organic and initially competition was limited. Today's competitors have typically followed Sony into the markets it pioneered. The successful targeting of innovators and early adopters generated healthy profit margins which were reinvested in the company, especially in research and development (R&D).

*This section on the early history of Sony has been developed in part from The Sony Corporation case study (1986) in Quinn, JB, Mintzberg, H and James, RM (1988) *The Strategy Process: Concepts, Contexts and Cases*, Prentice-Hall. Other material has been obtained from a variety of newspaper and journal articles.

The founder of Sony was Masaru Ibuka, who gathered together a group of engineers 'to develop some sort of electronics laboratory or enterprise'. He had previously owned and managed a factory supplying electronic instruments for the war effort, and he was now keen 'to do something that no other company had done before'. In the 1940s and 1950s Japanese companies were not perceived to be innovators or leaders in technology, but rather businesses which were very skilled at copying Western technology. From these humble beginnings, a truly innovative company with a worldwide reputation and presence has emerged.

The new enterprise had little capital, a limited track record and no definite ideas. Essentially, the managers just had aspirations to apply the knowledge of the founder in the development of consumer products. Ibuka's first invention for the consumer market was an electric rice cooker manufactured from aluminium. It failed to sell. The electric element burnt the rice at the bottom of the pot while failing to cook the rice at the top.

To generate a stronger cash flow to fund further developments the company started repairing and modifying wartime radio sets. The company was already earning revenue from electronic instruments such as voltmeters which were still being manufactured and sold to the new peacetime markets.

From the beginning Sony developed as an independent company; it was not a member of a Japanese keiretsu or business network. Shortly after the company was started Ibuka was joined by a close wartime friend, Akio Morita, who initially combined a part-time post at the Tokyo Institute of Technology with his time at the company. Unlike Ibuka, Morita was a member of a leading Japanese Samurai family. Morita was expected to forge his career in the family business, which was brewing sake. He had been trained in business skills from an early age. However, at university, he had proved himself to be a very talented electronics engineer. While Ibuka was passionate about inventing, Morita was a more realistic businessman who understood finance and marketing. The two friends proved to have valuable, complementary skills.

In 1946 Ibuka successfully persuaded Morita's father to allow Akio to join his business on a full-time basis. Morita Sr actually invested in the business and eventually became the company's largest shareholder. The company was formally incorporated as Tokyo Telecommunications Engineering Company (TTK) in May 1946, and valued at ¥198,000, which approximated to US\$500. TTK's next inventions were an electrically heated cushion and a resonating sound generator (for sending and receiving Morse code) which offered superior audio facilities to competing machines. The quality was high, and the American Occupation Forces were among the early customers. Although the products were relatively sophisticated the production facilities were housed in run-down, leaky premises. TTK also succeeded in obtaining contracts to convert and modernize all the equipment belonging to the Japanese Broadcasting Network. Noticeably, there were still no breakthroughs with products for the theoretically targeted consumer market. Ibuka then saw an early American reel-to-reel tape recorder in one of the offices belonging to the Occupation Forces.

Tape recorders – the first consumer product

Ibuka realized the potential of the machine and purchased the Japanese patent rights immediately. He was convinced that TTK had the requisite skills to design and produce a good-quality tape recorder. One major stumbling block proved to be a shortage of plastic in Japan, from which TTK could manufacture the reel-to-reel tapes. Import regulations prohibited the acquisition of plastic from abroad. TTK tried cellophane, rice paper and finally a specially calendered paper with a smooth surface and which could be coated with magnetic powder. They overcame the inherent drawbacks in the paper tape by building superior quality into the circuitry, recording head and amplification system. Although it needed both patience and money TTK became the first company in the world to manufacture the complete range of tapes and recorders, including the component parts. Altogether, this implied 12 different basic technologies.

Their first recorder, weighing 100 lb (45 kg), was introduced into the market in 1949. Several months

passed though before the first unit was actually sold – to the Japanese equivalent of a pub. Realistically, the device was too heavy, too bulky, too complex and too expensive. Once they realized why the market was slow and hesitant, Ibuka and his colleagues concentrated on reducing both the size and weight, and sought ways of halving the cost. Their main competition was from 3M, which was already a well-established and successful American corporation. 3M's magnetic tape, branded with the Scotch name, was a superior product which TTK sought to franchise. 3M were only willing to grant the franchise if TTK stopped manufacturing the hardware.

Transistor radios

Ibuka went to America in 1952 in search of new market opportunities for his smaller, cheaper tape recorder. It was on this visit that he began to realize the future potential for transistors, an invention patented by Western Electric of the USA. He returned home and told his engineers that they were going to use transistors to build radios – radios that would not need electricity for power and which were small enough for individuals to carry around easily. Current 'portable' models were the size of a typical briefcase, weighed over 10 lb (4.5 kg) and needed the batteries changed every few hours. Ibuka conceptualized a pocket-sized model and took up the challenge of developing the technology.

TTK had to license the patent from Western Electric at a cost of \$25,000. Protracted negotiations with the Japanese Ministry of International Trade and Industry (MITI) for the release of this amount of foreign currency imposed a nine-month delay. The transistor patent was granted in 1954.

Increasing sales of their lighter, cheaper tape recorders enabled TTK to invest in a research programme for transistors. Their aim was to achieve satisfactory yields of the high-frequency transistors which were needed if radios were to be manufactured at a commercial cost. Early transistors were utilized in such products as hearing aids, which operated at much lower frequencies. Nevertheless, TTK were beaten by Texas Instruments in the race to be first with a portable radio utilizing high-frequen-

cy transistors. However, in August 1955 TTK were also able to display a small portable radio. Its size was 8" × 4" × 1.5" (20 × 10 × 3 cm). The production target for the first year was 10,000, and they actually achieved 8000.

Ibuka's team concentrated on making an even smaller model, despite critics who argued that any further reduction in size would have to be at the expense of sound quality. TTK's greatest challenge lay in convincing their component suppliers that size reductions were achievable. TTK formed research alliances with a number of their suppliers and offered them technical help and expertise. Existing components were often straight copies of Western technology, a typical Japanese strategy at that time. Perseverance was rewarded in March 1957 when TTK was first to market with a pocket radio. The radio was marginally bigger than a normal shirt pocket, and consequently TTK started producing and marketing shirts with slightly larger pockets!

The company was renamed Sony at around this time. The new name had been derived from the Latin *sonis*, meaning sound. Ibuka and Morita believed the name to be simple, recognizable and easily pronounced in most languages. The name Sony quickly became a generic for transistor radios, and Sony enjoyed an early technology lead of between two and three years. Later product developments included transistorized short-wave and FM receivers.

Consolidation and growth

Sony was growing into a very sound company, diversified into a number of related areas and with markets around the world as well as in Japan. Its reliance on the Japanese government (for aid) and banking system was minimal. Ibuka and Morita were firmly in control and able to make quick decisions. Rapid expansion drove Sony to poach senior managers from other Japanese companies, an unusual practice in that country, and one which was frowned upon. But Sony was clearly not a typical Japanese business.

A new director of research was recruited from MITI, where he had previously worked for over 25 years. A printing company manager was appointed

and given a totally free hand to turn around a struggling semiconductor factory. An ex-jet pilot and talented opera baritone, Norio Ohga, was employed firstly as a music consultant. After his retirement from active stage work he became head of the tape recorder business and some years later he succeeded Akio Morita as chief executive of the whole Sony Corporation. It was Ohga who championed Sony's entry into the music and entertainments industries in the 1980s. One executive remarked: 'I never knew what hidden abilities I had until I came to Sony'.

Sony's workforce grew tenfold in the 1950s and fourfold in the 1960s. In the mid-1990s Sony employed 138,000 people around the world (see Exhibit 5). The business was controlled through firm budgeting and production control systems – but within these constraints employees were given considerable freedom and empowerment. Creativity was encouraged. Workers were provided with homes by the company, a normal Japanese practice. These homes, though, were small, prefabricated houses, whereas most large Japanese companies would house their workers in dormitories. Also unusually, Sony employees were given responsibility for their own residences.

Working practices

Production was organized in small cells, each a specialized unit with full control over its own work and with responsibility for monitoring its own output. Internal co-operation between cells was encouraged and fostered. The cells formed an interconnected and interdependent network. Each cell had a second cell as its main supplier and a third cell as its main customer. The role of management was to assist the cells, helping them to solve problems, setting overall goals and praising superior performances.

New employees, regardless of their background, education and intended functional role, would spend several months on a production line. Ibuka and Morita believed that it was important that all employees should understand the company's products, working practices and culture. It was also typical for Sony to switch people between jobs every few years. Frequently, workers would move from an

engineering to a production role, and vice versa. Rewards and bonuses were given to groups of workers rather than to individuals.

Employees were encouraged to be innovative 'in the interests of the company' and not to be afraid to make mistakes – as long as they did not make the same mistake twice. Young employees were deliberately given heavy workloads and considerable responsibility. New managers all had corporate mentors.

Sony motivates executives not with special compensation systems, but by giving them joy in achievement, challenge, pride and a sense of recognition.

Television – an important new product

Sony began to use transistors in new consumer products, introducing the world's first transistorized television in 1959, the world's first transistorized video tape recorder in 1961, and the world's first micro-television in 1962.

In 1960 Sony established a subsidiary in the USA, and Akio Morita moved with his family to New York. Sony's managers felt that they needed to know the US market by intuition and not be reliant on published statistics. Sony Corporation of America was subsequently developed into one of US's highest quality companies, renowned for both its products and after-sales service.

By the mid-1960s colour television was becoming established in the USA. The standard technology, which had been pioneered by RCA, was known as the 'shadow mask' system. A triangle of three electron guns created a grid of colour dots to produce the colour image. Sony did not want to copy this widely licensed US invention, and sought to develop a system based on a line (rather than a triangle) of electron guns in the television tube. Early trials were not successful, and not for the first time Sony appeared to some to be investing in a dream. Morita commented: 'If we wait and develop a unique product, we may start several years later, but we will be stronger than all the others in ten years'.

After several setbacks, and considerable frustration, Sony's new 'Trinitron' system was ready in

1967. Trinitron was a unique concept, using a single gun and a three striped beam system. Its competitive advantage was that the colour reproduction was superior to the RCA system. By spring 1968 the new Sony televisions were in the shops, priced competitively, and within a year Trinitron dominated the small-screen (12") market in Japan. Success in America, and systematically the rest of the world, followed almost automatically and inevitably. Production of Trinitron colour sets began in America in 1972 and in Britain in 1975.

Later, in the 1980s, Sony was the first company to develop a high-definition television standard. This innovation prompted a defensive competitive reaction in Europe. The European Commission founded an industrial consortium to develop a rival standard.

Video recorders

Video tape recorders had been in existence since the mid-1950s, but they were used primarily by the professional broadcasters. A number of Japanese companies, together with leading American electronics corporations, produced models. Philips (of The Netherlands) dominated the market in Europe. Sony made a deliberate decision not to enter the professional video market. Instead, Ibuka decided that Sony should manufacture less expensive commercial video recorders. Some time later he also decided that Sony should seek to develop videos for use in the home.

It was his vision and innovatory zeal that led to Sony's early predominance in the home video tape recorder market, but it was not a lead that they were able to sustain.

Sony's high-quality commercial system, the U-Matic format, was launched in 1972. U-Matic machines and tapes were both bigger than the VHS systems that are commonplace today, but much smaller than the existing professional systems. U-Matic machines used a single recording head and tapes enclosed in cassettes – professional machines normally had four heads and used reel-to-reel tapes. Because of its high quality, U-Matic survived for a number of years after smaller systems were available.

Sony pioneered home video with the Betamax format in 1976. Betamax cassettes were also larger

than the VHS format which was developed by Japan Victor Corporation (JVC), a subsidiary of Matsushita, under a patent agreement with Sony. Sony had invited Matsushita to join them with the Betamax format, but their suggestion had been declined. The early VHS tapes offered twice the recording time of Betamax, but Sony stuck with Betamax because of its superior reproduction quality. They believed that this advantage would guarantee success and consumer preference. They misjudged the market and their competitors. Most Japanese and American consumers preferred the smaller and cheaper VHS system.

Although relatively slow to take off, the video tape recorder reached a penetration level of 25% of households by the mid-1980s. Sony gave up on Betamax for the domestic market and instead produced VHS recorders and tapes, but never achieved a substantial market position. In 1990, for example, Sony had a 1% UK market share for video recorders and a 6% share of the blank tapes market. Betamax was always a more popular format in the broadcasting sector of the market, where Sony still enjoys an 80% market share.

There was a number of lessons for Sony. Not only had they failed to understand the needs and preferences of their customers, they had failed to promote their system effectively. JVC, in contrast, had been willing to share their technology and had entered alliances with owners of software – namely the studios who owned the rights to feature and television films which could be released on video. These lessons were instrumental in strategic decisions made by Sony in the 1980s.

The Sony Walkman

The Walkman is probably Sony's best-known product, and its launch in 1979 heralded the restoration of Sony's reputation and innovatory leadership. The Walkman introduced a new dimension to the way people listened to the radio and to pre-recorded music and 'changed the lifestyle of a generation'. The original Walkman was a compact cassette player with small earphones to enable highly portable listening without annoying or inconveniencing other people. Over 50 million sets were sold within

the first ten years. It is useful when walking and jogging and on trains and aeroplanes. The concept was later extended to a variety of different models, including waterproof and sandproof sets, radio receivers, special versions for children, compact disc players and, in 1988, video playback systems using Sony's new 8 mm video cassettes.

The idea for the Walkman had come from Ibuka and Morita. Morita knew that young people liked to listen to music constantly, often wanting to play it at a loud volume, and that their tastes and preferences were frequently very personalized. He also played golf fanatically and believed that an individual cassette player would appeal to a whole range of sportsmen and women. His assumptions were correct this time. The Walkman was successful from the day it was launched.

Other products and competition

Sony launched its Mavica all-electronic still picture camera in Japan in 1981. Marketing in America and Europe followed some years later. Mavica records the images on small magnetic discs, rather than film, and they can be viewed on home television screens instead of using slides or photographs. Hard-copy printing systems are available for people who also want a physical photograph.

These systems have so far failed to make major inroads into the popularity of film cameras, despite the dramatic success of hand-held video camera-recorders. These cameras became increasingly compact during the 1980s, making use of 8-mm video cassettes which can be transferred onto VHS format for viewing on domestic televisions. This market is very lucrative but very competitive and increasingly dynamic, with several major Japanese electronics companies involved.

Sony launched the first miniaturized camcorder in June 1989. It weighed just 1.5 lb (680 g), and it was one-quarter the size of existing camcorders. Within six months both Matsushita and its JVC subsidiary had introduced lighter models. Within a further six months there was additional competition from Canon, Sanyo, Ricoh and Hitachi. Sony intro-

duced two new models in Summer 1990. One was the lightest then available; the other had superior technical features.

Japanese competitors such as Matsushita (which also incorporates Panasonic branded products), Hitachi and Toshiba are all older and larger than Sony. Although their product ranges are not identical they are all diversified and active internationally. A number of these Japanese companies has, for example, diversified into consumer white goods (washing machines, refrigerators, and so on), which Sony has deliberately ignored. There are, in addition, many other smaller Japanese competitors. Sony also experiences competition from a variety of US and European producers, with certain companies successful in particular markets but perhaps less successful across the spectrum of the global consumer electronics industry. The major European competitors are AEG, Bosch, GEC, Philips and Thomson SA, which acquired Ferguson in the UK from Thorn EMI. Amstrad is a competitor for certain products only. No single competitor enjoys wide market dominance, although there are market leaders for different products. The dynamism of the market, with short product lifecycles and constant innovation, means that positions of leadership may well prove transient. Sony has always marketed its products creatively around the world, sometimes appearing more like a home producer than a Japanese company. Exhibit 1, which features examples of the humorous copy used in a number of radio and television advertisements in the UK, is included to illustrate that Sony is not a typical Japanese company. The advertisements all featured the instantly recognizable voice of John Cleese and date back to the late 1970s and early 1980s. It has also been claimed that many Americans actually believe that Sony is an American company.

In the early 1980s Sony formed an alliance with Philips to develop and launch compact disc players and CDs. At that time Philips had a substantial shareholding in Polygram, one of the leading recording companies, but not the controlling interest which it has today. Initially, the record companies in America and Europe were cautious about releasing their music on the new format; and this hostility

Exhibit 1 Sony radio and television advertisements featuring John Cleese used in the UK in the late 1970s and early 1980s

Good Evening.
 Good Evening Sir.
 I'd like to buy a Sony Trinitron Family Size Colour Television set please.
 Well, this is an off-licence Sir.
 I see. Well do you have anything else that would give me really bright, clear, colourful pictures?
 How about a gallon of creme de menthe? That'd put you on the way.
 But would the pictures be really sharp?
 Hmm – not really!
 And is it reliable?
 Well, you don't get the pictures immediately and there's always the danger your head'll fall off.
 Oh, I think the Sony'll be better then. I'll try a TV shop.
 Well, why did you come here in the first place?
 I wanted to annoy you.
 (Shop door bell)
 Ring
 Good afternoon.
 Good afternoon Sir. Can I help you?
 Yes, I'm looking for a colour television – what about this one?
 Ah, the Sony Trinitron 1810.
 Now, does it give a nice fuzzy picture and break down a lot?
 No, no, the Trinitron system means a very sharp, reliable ...
 Oh well, are the colours muddy and nasty?
 No Sir, they're very bright. It's a feature ...
 It's for my wife you see.
 Oh – doesn't she like television?
 Oh yes, but I don't like her.
 Ah well, now, this little Ruritanian set's a real shocker.

Really, really. I still like the look of this Sony Trinitron you know.
 Oh.
 Yes, I'll take it.
 But I must warn you ... it's not really right for you.
 I know, but it's all right. I'll smash it up a bit. Do you sell mallets?
 Sony the electronics people have asked me to tell you that they've just opened a fish and chip shop in Regent Street where you can wander in and play with the fish to your heart's content.
 Sorry, sorry, that's quite wrong. I got confused – er – it's not a fish and chip shop, its a TV, Stereos and Radio showroom – sorry – I got a bit muddled there – I'm doing an ad for some fish and chip shops next – sorry – er.
 Sony have a magnificent showroom and not a fish and chip shop in Reggent Street – sorry Regent Street – so if you want to go in and examine and operate stereo equipment, but not Halibut and Rock Salmon or anything fishy like that, go to 134 Regent Street. Sorry about the muddle.
 Look I am frightfully sorry to bother you but some awfully nice people called Sony have agreed to pay me some money if I'll tell you they've a terribly nice showroom in Regent Street where you can just wander in and play with all the Sony Stereo and TV and Radio equipment and listen to the quadraphonic demonstration without being pestered by anyone, just to see if you like anything, you see.
 It's at 134 Regent Street.
 There, I've told you.
 I've told them.
 (Cash register)
 Thank you.

had a formative effect on Sony's future diversification strategies. Sony and Philips still earn royalties for every CD that is sold.

Sony also competes in sectors of the global computer industry, which again involves several leading Japanese players such as Hitachi and Fujitsu, and many American and European businesses. The American competitors range from the giant IBM through a number of medium-sized businesses to several small and very entrepreneurial hardware and software companies. Sony has targeted particular niches and focused carefully.

Sony pioneered the 3.5" floppy disc, which quickly proved more robust and popular than its 5.25" predecessor. The disc, launched in 1980, was far more successful for Sony than its early word-processor, for which it was designed. This floppy has become the industry standard, and in the 1990s Sony retains 25% of the world market. Until the early 1980s Sony manufactured semi-conductors for incorporation in its own consumer products, and then, realizing the potential for sharing its technology, sold them externally. Sony has been a pioneer and market leader for several specialized components and has also

introduced a successful range of high-powered workstations.

Exhibit 2 provides a summary of Sony's product range in 1996. Exhibit 3 analyses the breakdown of Sony's sales by product and geography for the period 1973 to 1996. In the tables the category 'other products' mainly comprises computers and computing equipment together with Sony's chemicals activities. These businesses are essentially suppliers of necessary materials and represent vertical integration.

Lean manufacturing

Sony have seen lean manufacturing as another competitive weapon, and as both a supplement to, and partial replacement for, continuous innovation and new product developments. The improvements are still being sought, and are still happening, but for a number of products the speed of change has slowed down.

Lean manufacturing was necessary because the consumer electronics industry has become increasingly mature. At the same time it is this maturity, and the ability to slow down the rate at which new products and major product improvements are

Exhibit 2 The Sony corporation. 1996 product range

Percentage breakdown of sales in 1996

15%	Video equipment	– A leading manufacturer for broadcast and professional use. Domestic VCRs, digital camcorders, 8 mm camcorders, video disc players, laserdisc players, still image video cameras and tapes. Video tape
20%	Audio equipment	– CD players, hi-fi and mini systems, radio cassette players and radios, personal stereos (Walkman series), DAT systems and car stereos. Audio tape
17%	Television sets	– Including HD TB and giant monitors
29%	Other products	– Semiconductors. Electronic components. Computers and associated equipment (including games machines, PCs, laptops, disc drives and floppy discs). Cellular telephones
19%	{ Music and entertainment Filmed entertainment	– Sony Music Entertainment – CD and cassette software – Columbia Pictures – Tri-Star Pictures

Exhibit 3 The Sony Corporation
Analysis of turnover by sector

Product sales (%)	(Financial years)		
	1973	1977	1981
Video equipment	6	14	27
Audio equipment*	12	12	7
Televisions	41	33	23
Tape recorders and radio*	27	20	17
Other products	14	21	26

*From 1982 these categories were consolidated.

Product sales (%)	(Financial years)					
	1982	1987	1988	1989	1990	1991
Video equipment	43	31	29	27	26	25
Audio equipment	23	31	31	26	25	24
Televisions	23	21	20	16	15	16
Other products	11	17	17	15	15	15
Music and filmed entertainment			3	16	19	20

Product sales (%)	(Financial years)				
	1992	1993	1994	1995	1996
Video equipment	23	24	18	18	15
Audio equipment	25	24	23	23	20
Televisions	16	16	17	18	17
Other products	18	20	22	23	29
Music and filmed entertainment	18	19	20	18	19

Analysis of turnover by geography (selected years only)

	1973	1977	1981	1987	1991
Japan	53	39	29	34	26
USA	26	30	27	27	29
Europe	11	15	20	24	28
Rest of world	10	16	24	15	17

launched, that has facilitated lean manufacturing. Lean manufacturing systems imply some inflexibility, and are therefore preferable when products are not being constantly changed and updated.

Lean manufacturing describes manufacturing systems which are designed to reduce lead times and

costs. They are likely to require investment in information technology but not necessarily the most advanced manufacturing technology. 'Lean' implies simpler systems, often based on just-in-time principles, and greater reliance on a network of interdependent suppliers. It is these arrangements which

reduce the flexibility. In 1992, for example, Sony reduced the lead-time for manufacturing a video recorder by two-thirds.

Typically parts are ordered firmly just 48 hours before they are needed. This is only practical if suppliers are integrated into Sony's value chain and if product cycles are relatively long. Although relatively inflexible for substantive product changes, such systems can be made very flexible for responding to changing consumer demand patterns. Face-lifts, such as new housings, which are still changed frequently, can be accommodated without undue difficulty.

Overseas subsidiaries

Sony developed an extensive international business for three main reasons:

1. Sony lacked the domestic sales and distribution networks of its leading Japanese competitors and therefore looked to establish both production plants and sales networks around the world and close to its important markets
2. Sony wanted to be an innovatory pioneer for consumer electronics products and realized early in its history that it would be important to enjoy close proximity to its markets in order to understand and satisfy their disparate needs
3. The strength of the Japanese yen. When Sony was first incorporated the exchange rate was over 350 yen to the US dollar; in mid-1996 the rate was 108 yen to \$1. When Sony built its UK plant in South Wales in 1974 £1.00 exchanged for 650 yen. In 1996 the rate was in the order of 170 yen to £1.00.

Sony's first production plant outside Japan was built in Taiwan in 1967. In 1972 Sony began manufacturing in San Diego, California. Europe followed in 1973 with a plant in Spain. Sony began producing televisions at Bridgend in south Wales in 1974, and this remains its only British manufacturing plant. The extent of Sony's operations in each European country tends to be focused. For example, audio equipment is manufactured in France, magnetic tape in Italy and CD equipment in Austria. Countries such as Malaysia (colour televisions, audio and video

equipment) and Thailand (semi-conductors and magnetic tape) have more than one plant and a more diverse range of products.

Sony now has plants in America and in all major European and Far Eastern countries. Altogether, there are over 600 subsidiaries, and over 70% of Sony's sales are outside Japan. In comparison, the overseas sales percentages for three of Sony's main Japanese rivals are: Matsushita, 45%; Toshiba, 31%; and Hitachi, 24%.

The following sections chart how the innovative, successful and influential Sony began to lose its way.

Diversification into music and entertainments

Sony's diversification into the American music and entertainments industries was based on the following premise. To 'guarantee', or at least consolidate, the future potential for the permanently changing and improving consumer electronics hardware and gadgetry, Sony must be confident that the major entertainment companies would release their films and music in suitable formats. Sony therefore chose to integrate vertically and, by acquisition, secure a substantial presence in the entertainment software business.

In January 1988 Sony paid US\$2.2 billion to buy CBS Records. This was followed in November 1989 with the purchase of Columbia Pictures (Columbia and Tri-Star studios) from Coca-Cola. See Exhibit 4 for a summary of the previous acquisition of Columbia by Coca-Cola. This acquisition cost \$3.4 billion but Sony took on an additional \$1.6 billion in debts. At the time, this constituted the largest ever overseas take-over by a Japanese company. CBS became Sony Music and Columbia was renamed Sony Pictures Entertainment. There was some cross-synergy potential with the increasingly important pop music videos and the release of film music albums.

Table 1 shows how the hardware-software linkages were to be created.

Sony was followed into America by Matsushita, which acquired MCA, owners of a recording business and Universal Studios, for \$6.1 billion. Toshiba

Exhibit 4 Coca-Cola's acquisition of Columbia Pictures

In March 1982 the managements of the Coca-Cola Company and Columbia Pictures Industries Inc. agreed that Columbia should become a subsidiary of Coca-Cola. The news was greeted with mixed feelings and the *New York Times* summarized many commentators' opinions: '... may be a mistake. To make a conglomerate of a company that has succeeded because it has stayed with its speciality is a dubious strategy'. At the time the Coca-Cola drink held a 25% share of the American soft drinks market, and it represented some 70% of the corporation's sales. The company had developed additional products for existing and related markets, namely Tab (sugar-free Coke, 1963) and Fanta (fizzy orange juice, 1960); and it manufactured and distributed tea, coffee, wine and natural fruit juices. Products were sold in 135 countries around the world, including China and the USSR.

Coca-Cola had been looking for possible acquisitions in the food, health care and entertainment industries to enable it to grow more quickly than inflation. Any acquisition must not involve high technology (no experience) or require heavy capital investment in plant. While looking for suitable companies Coca-Cola concluded that health care was becoming too high tech and that food companies did not offer a profit margin as good as its existing business. Columbia proved attractive because it was involved in home entertainments (cable TV and video), growth of which should be good for the Coca-Cola drink. In addition it had a reputation for successful films (*Kramer versus Kramer*, *The China Syndrome* and *Close Encounters* in the recent past), and it had an extensive film library of past productions which were undervalued in the balance sheet given their home movie potential.

Coca-Cola argued that potential synergy existed because both companies were experienced in mass consumer markets and worldwide operations, and both appealed significantly to young people. But were these sufficient grounds for synergy?

In 1986 David Puttnam, British producer of *Chariots of Fire* and *The Killing Fields*, joined Columbia, but left the following year. He departed two months after Coca-Cola signed an agreement with Tri-Star Pictures, another film and TV company in which they had built a 33% stake, whereby the entertainment interests of both organizations were formed into a separate independent company, 80% owned by Coca-Cola and managed by Tri-Star executives.

Commentators contended that one reason behind this move was the reality that Wall Street was increasingly favouring pure rather than conglomerate businesses. In truth, Columbia had always been profitable through the 1980s, but the key success factors for soft drinks and motion pictures were significantly different, and synergy proved elusive. Soft drinks, whatever their brand name, have certain similarities, and the emphasis must be upon effective marketing to build and maintain a market image. Films are often very different from each other.

By mid-1989 the film company was called Columbia Pictures Entertainment, and Coca-Cola held 49% of the equity. When Sony of Japan offered to buy Columbia Pictures, Coca-Cola was said to be 'demanding a high price for its shares'.

bought a stake in Time-Warner. Some critics argue that the Japanese 'have been mugged' and paid over the odds. Others have commented that Sony has been allowed to buy 'a significant part of America's soul'. Matsushita did not keep MCA for very long and resold it to Seagram, the Canadian drinks manufacturer. Matsushita tried unsuccessfully to run MCA

from Japan; it was less willing than Sony has been to devolve significant power to foreign managers. The Toshiba/Time-Warner link has proved lucrative for the development of digital video technology.

Sony's gamble concerns the future and its ability to derive the potential synergy it claims is there. There is certainly no universal agreement that the

Table 1 The synergy between Sony's hardware and new software products

Film and recording studios	Cameras, broadcasting and recording equipment all provided by Sony Sony also manufacture all the blank recording tape and films required
Film and music production	Sony would determine the films and music which would be produced – and, critically, control the release formats Sony also gained control over 12 television stations and the Columbia libraries, including 300 film titles and 20,000 recorded television shows. These TV shows alone provide Sony with an annual income of \$100 million
Consumer hardware	At the time Sony manufactured: high-definition televisions; video recorders; the range of Walkman products covering audio cassettes, CDs and videos (8 mm format); CD and hi-fi equipment
Consumer software	Sony manufacture the film, video tape, compact discs and cassettes upon which the software will be released There are, quite simply, several outlets for a single piece of recorded material Additional opportunities for Sony lie in computer games based upon their movies and designed for high-definition television and the Sony PlayStation; and in the future in digital video discs which are seen as the replacement for video tape.

synergy is anything other than imaginary. The hardware and software businesses are, quite simply, different. It is a question of technology versus creativity; and the key success factors are not the same. Some analysts, who disagree with the change of direction, have argued that the money would have been better invested in information technology.

The inherent risks

There were three areas of risk for Sony.

The management risk concerned Sony's ability to manage an American acquisition. Sony was innovative but managed by engineers. CBS and Columbia are 'people businesses'. Rather than try and manage the acquisitions from Tokyo, Sony decided early on to decentralize the business and recruit experienced Americans to control the companies. The entertainments businesses were controlled wholly from Hollywood until 1995. Although Akio Morita's brother was chairman of Sony America, American-born Mickey Schulhof was the chief executive until he resigned in 1995. When he left, Schulhof had worked for Sony for 21 years; unusually for a foreigner, he had been appointed to the main Sony board in 1989. Producers Peter Guber and Jon Peters, who had recently made the box-office suc-

cesses *Batman* and *Rain Man*, were brought in by Schulhof at a cost to Sony of \$200 million.

As it has become an increasingly global corporation, Sony has recruited more European and American managers to support the Japanese leadership. The integration of the different cultures is not perceived to be a problem. 'Sony's culture is heterogeneous and is strengthened by a continuous injection of new people and ideas.'

In reality, the Japanese have accepted that the Americans must be given a free hand with the entertainments businesses, and that they must be given sufficient capital. Although it cannot have been easy for Sony to delegate such authority and responsibility, they have nevertheless done it. As a consequence the hardware and software businesses have so far been run as separate, independent businesses.

The second risk was the political risk. Would there be a hostile reaction from the US public? Sony was well established and well known in the USA, thanks to the past efforts of Morita, and consequently this has not proved to be a major concern.

Third was the significant and still unresolved strategic risk. Did Sony need to go into the software business? Did it pay too high a price, and could it

recoup its investment? Is the synergy potential real or imagined? Could Sony succeed where Coca-Cola had failed?

Peter Guber has commented that Sony in Tokyo did not use the expression synergy, but nevertheless expected that Sony Entertainments would find ways of marrying the technology resources of the electronics businesses with entertainments. In this respect a new film should ideally be accompanied by a soundtrack produced by Sony Music. Cinemas will use Sony's digital sound equipment, which is said to be superior to Dolby systems. Depending on the film Sony will manufacture related video games based on the movie's characters.

Two main arguments against the synergy between hardware and software have been put forward. First, Sony must still make its hardware freely available to all software producers. Secondly, the decision by retailers to stock particular software formats, and the decision of consumers to buy, can only be influenced and not controlled by Sony.

The outcome – so far

Filmed entertainment

Sony acquired a film studio which had previously been very successful with such films as *Lawrence of Arabia* and *Bridge Over the River Kwai*. Sony also inherited *Hook*, directed by Stephen Spielberg at a cost of \$62 million. It recouped \$250 million at the box office. Sony allowed Columbia an annual film budget of \$700 million, which was above average for the industry and brought immediate criticisms of over-spending.

In December 1992 Sony concluded an exclusive long-term deal with Barbara Streisand to cover her music and film work. Streisand already recorded on CBS. This followed a similar deal with Michael Jackson in 1991, mainly covering music.

Sony have brought out a number of major box office (and consequentially, financial) successes, including *Bugsy* (Warren Beatty), *Prince of Tides* (Barbara Streisand), *My Girl*, *A League of their Own* (Madonna), *Little Women*, *Legends of the Fall*, *Philadelphia* (Tom Hanks), *Jumanji* (Robin Williams), *The American President* (Michael Douglas) and *Sense*

and *Sensibility* (Emma Thompson). There has been one major disaster and box office failure: *Last Action Hero* with Arnold Schwarzenegger. Sony's films accounted for 15% of US cinema box office receipts in 1990, achieving an even higher proportion for a short period of time, but by 1994 they had fallen below 10%. At this time Sony was earning an average revenue of \$18 million per film; Paramount Studios was averaging \$55 million. Nevertheless, high-budget films continued to be made, leading to accusations that they were driving up the already high production costs. These comments caused Jon Peters to resign.

His departure was followed by that of Peter Guber in October 1994. One month later Sony wrote 265 billion yen (£1.67 billion) off the value of Sony Pictures Entertainment, commenting: 'the business has not provided adequate returns. Additional funding will be needed to attain acceptable levels of profitability'. It has been estimated that Sony had at this stage already invested \$4.6 billion on top of the \$3.4 billion it paid to acquire Columbia Pictures.

A Morgan Stanley analyst in London commented in 1994:

If there is a moral to this story, it is that Japanese electronics groups do not make good parents for Hollywood movie studios.

Television films began to take priority over high-budget feature films, less attention was placed on finding elusive synergies and the relative success of the movie studios improved in 1995. Nevertheless, Schulhof left Sony at the end of the year and he was not replaced. His number two would continue with the same responsibilities but now report to the new strategic leaders. Nobuyuki Idei and Norio Ohga in Japan (the succession of Norio Ohga and Nobuyuki Idei to the senior positions in Sony is described later in the case). Wall Street interpreted this to mean that Sony would be willing to sell at the right price.

Music

The music business was generally more stable and profitable than the movie studios; Sony's leading artists, in particular Michael Bolton, Mariah Carey, Oasis and Bruce Springsteen, continued to deliver

successful albums. However, Michael Jackson's popularity fell back when he was accused of being involved with a minor, and Sony lost George Michael when he demanded to be released from his contract.

Product disappointments: the mini-disc and DCC

These two new formats for recorded music were both launched towards the end of 1992. By this time vinyl records were almost forgotten and, in certain countries including the UK, CDs were outselling audio cassettes.

Mini-disc is a small (2.5") compact disc which sells for roughly the same price as a conventional CD. It was invented by Sony, as were the new mini-disc players. Mini-discs are not compatible with existing CD equipment. There is no loss of quality, there is random access (instant track selection) and blank discs can be bought for home recording. These blanks cost 40% of the pre-recorded disc price. They are ideal for Walkman-sized players.

Digital compact cassettes (DCC) were developed jointly by Philips and Matsushita. Philips designed the hardware, Matsushita the software. DCC offers CD-quality sound reproduction (a marked improvement on standard audio cassettes) at the same price as a standard CD. DCCs contain a spare track for recording additional data, such as biographical details of the artists, which can be viewed on both special LCD and normal TV screens. The new DCC players will also play standard cassettes, as the two formats are the same size, but DCCs cannot be played on existing audio equipment. Philips and Matsushita saw this as a major advantage as the average person owns some 60 audio cassettes. Blanks are available. The major disadvantage was the existing drawback of standard cassettes – random access and track selection is not possible. In addition, the fear of piracy was greater for DCCs than for mini-disc.

Nevertheless, the six leading record companies worldwide (including Sony Music) all agreed to release music on DCC. Initially only Sony and EMI Music were willing to support mini-disc, with the others looking to protect their existing CD sales for the time-being. It seemed unlikely that they would

not support mini-disc if consumers were enthusiastic about the new format. After all, mini-disc players were cheaper than DCC players, and Sony was able to offer a combined CD/mini-disc player in 1994.

Initially consumers were reluctant to commit themselves to either product until there were clear indications of leadership. Could both formats succeed, or must there be a winner? Technical superiority alone would not guarantee success. In the event, both have failed to really take off. Some 750,000 mini-disc players have been sold, but most of these are in Japan; it continues as a niche market product. DCC was less successful.

Changes in strategic leadership

Globalization was always a personal crusade of Akio Morita.* In 1996 he was over seventy and retained only a peripheral involvement from his home in Hawaii, but he still exerted influence. Morita retired as chief executive officer in 1989 (he was succeeded by Norio Ohga, who had been chief operating officer since 1982) but stayed active with the title of chairman. Partially paralysed by a stroke in 1993, he relinquished this last position in 1995. Morita spoke perfect English and was highly Westernized. He was the public face of Sony, especially in America. He believed that Sony should be a good and ethical corporate citizen everywhere it operates, and he, like Ibuka, believed that the pursuit of profit is not the principal objective. Sony's plants have always been designed to fit into their local communities. In Alsace, for example, Sony inherited a vineyard with a piece of land that they bought. They continued to make wine, labelled Chateau Sony!

Morita frequently incorporated a strong element of intuition in his decision making. Ibuka was the same. Their executive successor, Norio Ohga, had a more considered style. According to Sony, however, his accession would have no effect on the basic culture. Sony would continue to 'operate rapidly and efficiently whilst placing strong emphasis on the long-term development of people and technology'.

*Akio Morita died in October 1999.

Morita believed that Sony's commitment to innovation was deeply embedded in the culture of the organization worldwide. He argued that there were three essential features:

Creativity in technology	Sony is committed to high standards for the technical engineering within its products
Creativity in product planning	This technology must be harnessed to design useful, attractive and user-friendly products
Creativity in marketing	The organization must commit resources to ensure that customers are persuaded to buy Sony's products.

Interestingly, Sony's Betamax video was characterized by the first two of these – but Sony failed to persuade the market that it was superior to the VHS format. The Walkman was a supremely successful example of effective product planning and marketing, but it was still harnessing 'old' technology.

Ohga was 65 years old in 1994; he had undergone a coronary bypass operation three years earlier. In 1995 he elected to step back and nominated Nobuyuki Idei to succeed him. Idei was currently the chief operating officer but, unlike Ibuka, Morita and Ohga, his background was not in engineering. He was essentially a marketing person who had worked for Sony for over 30 years. Typically he is perceived to be 'un-Japanese' and he speaks fluent English and French. Idei was determined to implement change in the once-mighty Sony whose performance had recently been deteriorating. In the year ended March 1995 Sony made a pre-tax loss for the first time in its history.

He stated that his main role would be to 'turn Sony into a company which can identify with a new generation of consumer electronics users – the digital dream kids'. There was to be an increased research and development emphasis on software, networks and information technology and new products relevant for the digital age.

The *Financial Times* (19 July 1996) commented that 'Sony, a young maverick company up to the 1980s, had become the sprawling, bureaucratic organization from which its founders sought to dif-

fer'. Idei was also determined to continue with the structural changes he had begun in 1994.

New products in the mid-1990s

Digital video

Similar to the way in which the CD replaced the vinyl record, digital video is predicted to replace the video cassette players and tapes which prospered in the 1980s. Digital video discs (DVD) and players (DVP) play digitized images onto a screen and are seen as an ideal format for computer-linked interactive video, the multimedia dream. As was the case with video, authorship of the technical standard is seen as critical as it will bring lifelong royalties, marketing advantages, power and influence. For digital video, the hardware/software challenge demands that the hardware and data formats meet the needs of the so-called information superhighway, including music and film makers, and the personal computer, telecommunications, cable television and satellite broadcasting industries. For Sony this represents a philosophical shift. The last major Sony breakthroughs, the Walkman and the compact disc, were driven largely by the needs and preferences of customers; digital video will be producer driven because of the complex array of interested parties.

Sony chose to develop digital video with its CD partner, Philips. By 1993 it was clear that Sony-Philips was in competition with an alliance between Toshiba and Time-Warner. Sony's DVD was single sided and could store over 2 hours of video. Toshiba's super-density disc was double-sided and offered greater storage capacity, equivalent to seven and a half normal CDs. Sony was convinced that its costs and prices would be lower and that these issues would outweigh the capacity issue. However, by early 1995 Sony and Philips were largely isolated, supported in the main by Mitsumi, Ricoh and Teac, who all manufacture floppy disc drives. Hitachi, Pioneer, Mitsubishi, Thomson and, most critically, Matsushita/JVC supported the rival alliance. Initially Sony and Philips were determined to carry on with their own DVD, but in September they 'accepted the inevitable' and adopted the rival format.

The PlayStation

Sony's PlayStation is one of a new generation of 32-bit computer games systems, which are far faster and more graphic than their predecessors, the 16-bit systems. Sony, which was already active in games software, entered the hardware market in September 1995 with a high-quality but competitively priced product and immediately took market share away from the two industry leaders, Sega and Nintendo. Sony's strategy was to price low to seize share and use this to boost sales of its more profitable and highly innovative games. The Sony PlayStation achieved sales of 3.2 million units in its first year, two million of these in trend-setting Japan.

The Sony PlayStation in explored further in the next case study.

Personal computers

The case described earlier how Sony became a major player in the computer floppy disc industry; it also manufactured several other computer components. In November 1995 Idei announced a new strategic alliance with Intel to develop a new range of personal computers and associated software. Intel, the world leader for semiconductor products, would provide the main circuit boards for a computer which would offer exceptionally high-quality sound and graphics, ideal for multimedia applications.

Idei saw this as an essential development for Sony to exploit digital video. The PC industry is still growing and, although it is very crowded and competitive, there are real opportunities for truly distinctive new products. The Sony PCs were to be launched first in the discerning American market, with Japan and Europe following on later.

Structural changes

In the 1980s Sony's international strategy was one of 'global localization'. Sony aimed to be a global company presented locally, and this involved devolving authority away from Tokyo and expanding manufacturing and R&D around the world. The typical large Japanese company had established both pro-

duction and distribution networks around the world but had sought to remain centralized, with power firmly located in Japan.

Sony, however, divided the world into four – Europe, America, Asia and Japan – and created four organizations which *should* be virtually self-sufficient, and ultimately locally financed, independent businesses. In this respect Sony was seeking to become 'Japan's first truly global company'. The plan involved the systematic transfer abroad of all the functions required to 'perform the entire life cycle' of its products, namely design and development, engineering, production, marketing and sales. Sony already owned its own chains of retail outlets for consumer products in selected major markets. Sony was looking to devolve investment decisions, R&D, product planning and marketing. 'Changes can be implemented quicker when everything is on the spot.'

Sony created seven business groups in 1983 (this was later extended to 23) to co-ordinate the production and marketing of particular products around the world. With the exception of entertainments activities, the co-ordinating power remained in Tokyo. Structurally, Sony companies in the UK, France, Spain, etc., theoretically reported to Sony Europe, based in Cologne, and with a Swiss chairman.

With the exception of entertainment the structure was designed to work as follows. Strategic decisions were all to be made centrally in Tokyo; operational decisions, concerning such issues as pricing and production, would be devolved to regional managers. R&D at the basic development level remained centralized in Tokyo; local centres would concentrate on adaptations for local needs. Staff would be transferred between countries.

In theory, then, only corporate strategic issues should be referred back to Tokyo. These included requests for capital for investment to build a new factory and permission to alter the structure. In practice, managers bypassed the regional layers and contacted Tokyo for advice and guidance on operational matters. The actual practice and culture lagged behind the theory, and Sony became overbur-

dened by administration, rather than an organization that was quickly responsive. It had 'drifted from a paragon of creativity and entrepreneurial spirit to a bloated bureaucracy'.

When the strategic leaders decided that a different form of decentralization was required to deal with the global/local issues, they acted quickly and decisively.

In spring 1994 Sony, with the exclusion of the American entertainments businesses, was divided up into eight separate divisions; these were not of equal size. They were to be called companies and they would enjoy considerable autonomy and power. Each would have its own president and would be responsible for design, manufacturing and marketing. The three largest companies were: consumer audiovisual products; components; and recording media and energy (batteries). The other five were: broadcast products (equipment); business and industrial systems (work stations); telecommunications (including mobile phones); mobile electronics (for cars); and semiconductors.

The changes proved to be successful but Sony decided to modify the structure further in spring 1996 to reflect its changing strategic emphasis. Eight companies became ten. A new one was formed to cover personal computers and information technology. The large audiovisual company was split into three. Telecommunications and mobile electronics were combined into a single company. Four new R&D laboratories would support information technology and semiconductors. In addition, Sony created a new executive board to oversee corporate strategy, to integrate the companies effectively, and to foster learning and sharing.

Financial outcomes

Exhibits 5 and 6 provide summaries of key information from Sony's profit and loss accounts (1973 to 1996) and balance sheets (1986 to 1995). The data show that Sony has never been hugely profitable

(some, but not all, of its major Japanese rivals have been more profitable), and that until the 1990s it has experienced steady growth. The impact of the American acquisitions in the late 1980s is clearly illustrated in the 1994 and 1995 figures. Sony's once-high R&D expenditure was reduced to approximately 6%, which is actually typical for Japanese electronics companies. The figures should, however, be treated cautiously. The published figures will incorporate adjustments for profits and losses on currency fluctuations and therefore not reflect pure trading successes. The figures are in Japanese yen and, given the continual revaluations of the exchange value of the yen, were the accounts to be restated in the currencies of the countries in which Sony traded, the company's growth would have been more marked. A proportion of the stated long-term debt is in the form of Japanese bonds carrying a 1% rate of interest.

The first major setback was in the 1991/92 trading year when the parent company in Japan reportedly lost money and relied upon Sony's international businesses. Considerable income falls were experienced in chemicals and magnetic tapes; electronic parts and products held up satisfactorily in the global recession. Sony's music and entertainments businesses also performed relatively well in that year. Sales of consumer electronics reflected the effect of the recession in the 1992/93 results, when rising debt forced a reduction in capital expenditures. Sales began to pick up in 1993/94 but profits slumped after the film studio write-offs in the USA. New strategies and products brought about a restoration in sales revenue for 1995/96 but profits remained below those of earlier years.

Have Sony's fortunes been turned around with the strategic and structural changes introduced by the new strategic leader? How much more change will be required to sustain the renewed growth and prosperity?

Sony Corporation <http://www.world.sony.com>

Exhibit 5

Sony Corporation profit and loss summary, 1972–1996 (m¥)

	12 months to 31.10.		12 months		17 months		Year ended 31.3.						
	1973	1978	1982	to 31.10.86	to 31.3.88	1989	1990	1991	1992	1993	1994	1995	1996
Turnover	314,000	534,900	1,114,000	1,325,000	1,431,000	2,145,329	2,879,856	3,616,517	3,822,000	3,879,000	3,610,000	3,827,000	4,593,000
Profit before tax	49,159	52,378	85,542	76,405	73,497	165,516	227,429	264,591	197,177	92,561	102,162	(220,900)	138,200
Profit after interest and tax	24,503	22,991	39,671	35,368	33,536	70,340	100,453	112,193	120,121	36,260	15,298	(293,000)	N/A
Expenditure on R&D	N/A	N/A	N/A	N/A	N/A	N/A	180,000	142,000	165,000	206,000	N/A	N/A	N/A
Average number of employees	20,600	27,112	43,126	47,600	60,500	78,900	95,600	112,900	N/A	N/A	N/A	130,000	138,000

Exhibit 6

Sony Corporation balance sheet summary 1985–1995 (m¥)

	12 months		17 months		Year ended 31.3.					
	To 31.10.1986	To 31.3.1988	1989	1990	1991	1992	1993	1994	1995	
Total fixed assets and investments	476,014	789,856	931,000	2,168,000	2,369,000	2,589,000	2,411,000	2,246,000	2,077,000	
Total current assets	974,130	1,077,000	1,434,000	2,202,000	2,234,000	2,358,000	2,110,000	2,024,000	2,147,000	
Total current liabilities	628,294	944,271	1,119,000	1,996,000	2,105,000	2,052,000	1,734,000	1,408,000	1,609,000	
Net assets	821,850	922,585	1,246,000	2,374,000	2,498,000	2,895,000	2,787,000	2,862,000	2,615,000	
Equity capital and reserves	606,392	650,346	911,800	1,430,000	1,476,000	1,537,000	1,428,000	1,330,000	1,008,000	
Long-term loans	144,000	196,000	221,000	646,000	695,000	885,000	880,000	984,000	906,000	
Long-term provisions	71,458	76,239	113,200	298,000	327,000	473,000	479,000	548,000	701,000	
Total capital employed	821,850	922,585	1,246,000	2,374,000	2,498,000	2,895,000	2,787,000	2,862,000	2,615,000	

Questions

1. Describe and evaluate the early strategies which made Sony a successful and innovative company.
Can the recent changes to the corporate strategy and structure be justified strategically?
2. How would you evaluate Sony's track record as an innovative company?
3. Provide a strategic audit of Sony in the early 1990s.
How do you think Sony will now develop during the mid/late 1990s?
4. How does Sony compare and contrast with the typical Japanese corporation?