

NEC

THE MARKET

NEC Australia's business area covers computers, communications and home electronics, but the traditional boundaries dividing these sectors are becoming obsolete as technologies rapidly converge.

It is already apparent that the most successful companies in the new millennium will be those that take a multifaceted approach to business challenges and offer customers the most advanced solutions.

NEC Australia is well positioned to profit from future opportunities, for at the core of the company's strategy is multimedia; integrated technology that provides brilliant answers and anticipates longer term needs.

Being a pioneer in new trends is no accident, for one of the defining characteristics of the company's nearly 30 years in Australia has been a striving to develop and introduce ground breaking products that have led the market and shaped its growth.

As a result, the company's horizons have widened, and in addition to serving an expanding local market, exports to customers worldwide are a vital and growing source of income.

ACHIEVEMENTS

Many of the infrastructure projects the company has tackled in Australia have made a substantial difference to the way Australians communicate and hence to their quality of life.

NEC's initial contracts were in the microwave communications field linking far-flung corners of the country to the national network. The early 1970s saw a number of important projects completed, for example, the Townsville to Mount Isa link and later the Sydney to Moomba link.

NEC was also an early pioneer in the manufacture of core communications technologies in Australia. Production of PABX systems began at the company's Mulgrave plant in early 1980. By August 1989, ten thousand systems had been sold in the home market and the company had firmly established a dominant position in PABX with market share of more than 50%. NEC has been able to maintain this leading role with products such as the 'future-proof' NEAX 7400



ICS (Integrated Communications System) the most advanced PABX in the world.

In the computer systems field, NEC has always endeavoured to bring the most advanced products to the Australian market and the introduction of the 5800, a powerful range of servers in 1996, caused a sensation.

The Versa Notebook PC range has constantly been at the forefront of notebook technology with multimedia models for many sections of the market, from education to business users who demand top quality and leading edge technology.

In addition to marketing powerful servers, workstations, PCs and other computer products, the company has also been helping Australia's balance of payments by winning some healthy export contracts.

In 1992, NEC Australia in a consortium with Olex Cables won a \$100 million telecommunications order to link China's east and west. It was the largest telecommunications contract ever awarded to an Australian consortium by China and was won against strong international competition.

In June 1996, the company received a \$43 million contract to provide advanced communications to thousands of villagers in rural communities in Indonesia. In the same month a \$10 million contract from Brazil for mobile phones to be manufactured at Mulgrave was announced.

NEC Australia was awarded these and other contracts because of levels of manufactur-

ing and service that consistently exceed the highest standards.

In recognition of this, the company has been accredited with a number of international standards including ISO9001 for quality management systems and ISO14001 for excellence in Environmental Management Systems.

NEC Australia was the winner of the coveted Australian Quality Award in 1994.

Underscoring its commitment to local research and development and manufacturing for exports, NEC became the first Japanese company in Australia to sign the Partnership for Development agreement with the Federal Government in 1989.

Over the seven years of the agreement projected targets for both investment in R&D and locally manufactured exports were constantly exceeded. During the period, NEC Australia injected more than \$150 million into local R&D and exported more than \$415 million of locally manufactured products, systems and technical expertise to over 35 countries.

HISTORY

NEC Australia has provided high quality computer, communications and home electronics products to businesses, government and the general public since 1969, but the history of NEC Corporation

goes back much further.

Founded in 1899 in Tokyo, Japan, NEC was originally a subsidiary of Western Electric, an American company producing telecommunications equipment. The company grew fast and soon gained a reputation for innovative and



reliable products.

International expansion which began on a small scale in the 1950s, really took shape in the late 1970s with marketing and manufacturing subsidiaries established on every continent.

The 1970s and 80s were a period of expansion for NEC in Australia. In July 1971, NEC Australia opened its Mulgrave manufacturing plant in Victoria producing microwave equipment.

As NEC's activities expanded in Australia, two separate subsidiaries dealing with information systems and home electronics products were established. To pool resources and enhance solutions-building capabilities, these two companies and the original NEC Australia were amalgamated to form one company in April 1996.

NEC Australia is headquartered in Glen Waverley, Victoria, and the much expanded manufacturing



facility, now called the Mulgrave Plant and Technology Centre, is an NEC Corporation Centre of Excellence for research into mobile and communications technologies.

The company employs 1400 people throughout the country and NEC Australia is an integral part of the NEC world network, a giant multinational employing 151,000 people with sales in excess of \$55 billion in 1996-97.

THE PRODUCT

NEC Australia designs, develops and manufactures a full range of advanced products and markets them domestically and overseas. These products, which can be described as the fundamental components of multimedia, include: network transmission technologies for microwave, satellite, broadcasting, fibre optics, multiplex and ADSL, PABX, cellular mobile phone and pager technologies, PC peripherals and home electronics.

NEC's home electronics products in Australia include high grade projection televisions, VCRs, microwave ovens and air conditioning units. In 1994, NEC commemorated a production milestone when it unveiled the one millionth Australian produced colour television.

One of the most important products developed by NEC Australia is the Integrated Services Distribution System which utilises ADSL (Asymmetrical Digital Subscriber Line) technology to provide digital video, high speed internet, business data and telephony to the business or home over existing copper telephone lines. This innovative total solution is cost effective against alternative access network platforms, and will make a major impact as it is adapted by



domestic and overseas carriers.

In 1994, Optus launched the world's first truly mobile satellite communications service based on NEC Australia's advanced satellite technology M-SAT. Designed and developed at Mulgrave, M-SAT is a highly reliable, cost effective system.

The most recent version of M-SAT, the S2, has won high praise from customers and in addition to being supplied to the Australian Defence Forces, has been chosen by the Italian concern Telespazio in a \$11 million contract for services in Europe.

RECENT DEVELOPMENTS

In July 1997 the company won a \$19 million contract to supply the Bureau of Meteorology and CSIRO with one of the most powerful



supercomputers in the world, the SX-4. Many times more powerful than any other supercomputer ever installed in Australia, the SX-4 contributes to creating longer range and more accurate weather forecasts for Australia and the South Pacific.

Another technology with potential impacts on everyone's daily life is the multimedia kiosk. NEC Australia is bringing government 'on-line' with the development of the world's most advanced multimedia kiosk and interactive system. The Victorian government chose NEC Australia and partner Aspect in November 1996, to provide the State with an advanced Electronic Service Delivery (ESD) network comprising of kiosk terminals, internet home PC and Interactive Voice Response (IVR) systems. The project is being closely watched as it could revolutionise the way people deal with government and pay bills.

In education, NEC has pioneered the use of PCs and multimedia network solutions in Australia's schools. Victorian schools such as St Michael's Grammar and Methodist Ladies College in Melbourne have become well known as among the best examples in the world of excellence in multimedia education.

In the home, NEC's most recent breakthroughs are changing daily life with leading edge technology such as wall-hanging 33, 42 and 50 inch plasma TVs, Digital Video Disk (DVD), and the 'Fishclub', a virtual aquarium that uses a Hivision monitor for the viewing of rare and beautiful marine life. The Fishclub is also a good example of how NEC technology is helping to protect the environment.



PROMOTION

NEC's corporate positioning is based on its reputation as a high quality supplier and manufacturer, with a commitment to increasing R&D, and to the development of Australian industry.

This positioning is supported by a long term commitment to high quality advertising aimed at demystifying technology. Promotional activities include television, radio, the print media, outdoor signage, direct mail, and point of sale, as well as participation in a range of technology exhibitions.

NEC also has a proud history of good corporate citizenship with a broad range of sponsorships in the arts and sports events including the Davis Cup.

BRAND VALUES

A true multimedia enterprise, NEC is a leader in the computer, communications and electronic device fields, and is the only company in the world ranked in the top five in each of these areas. The NEC brand is renowned for its association with quality and reliability and has an awareness level of 97% among the Australian public.

The company has created strong brand identification and a positive image from its entertaining advertising approach using the company icon 'Mr Okamura'. NEC's image is of a high tech but friendly company, with high quality, simple-to-use products, priced at a premium.

The strong brand association with Mr Okamura has made technology more accessible and reinforced the accurate perception that NEC is approachable and that its products are user friendly.

Things you didn't know about NEC

- Long before 'multimedia' was even a word, NEC had foreseen the convergence of Computers and Communications coining the term "C&C" in 1977.
- In a survey carried out in March 1997 by Japan's leading business daily, the Nihon Keizai Shimbun, NEC Corp was ranked as Japan's most environmentally friendly company.
- NEC started life as a subsidiary of Western Electric from the USA and was Japan's first fully owned foreign company.
- NEC Australia's scientists and engineers developed the world's first truly mobile satellite telephone in 1989.
- NEC not only manufactures the world's fastest supercomputer, the SX-4, it also has announced a prototype for the world's first 4 Gigabit DRAM, a silicon chip no larger than a human thumbnail able to store the complete works of William Shakespeare 64 times!
- Australia has one of the world's lowest rates of organ donations, but since 1986 NEC Australia has been providing thousands of kidney transplant patients throughout Australia with NEC Lifepagers, guaranteeing they can be contacted if a kidney is available.
- NEC helps catch thousands of criminals all over the world with its Automatic Fingerprint Identification System (AFIS).
- NEC is Australia's only mobile phone manufacturer, currently producing GSM handsets for the world market.