Micro Rentals—the Advantages

Anna Chiarelli (left), and Jasmine Tham, pictured at WARCC's Microcomputer Support Help Desk

Renting micro computers is an attractive choice for many organisations for a variety of reasons, according to Rob van Zanten, manager of WARCC's Microcomputer Support group (MCS).

The group has been operating successfully in the microcomputer rentals market for six years. At any one time the group has more than 200 units rented out to tertiary institutions, private businesses, government agencies and individuals.

Renting computer equipment offers MCS customers several advantages such as evaluating the suitability of equipment; meeting short-term needs; solving cash flow problems for long-term requirements; keeping pace with rapid technological changes; and access to the group's support staff at no charge.

'Renting a micro computer is ideal for short-term projects of less than a year. Once the project is complete, the equipment is no longer wanted,' Rob said.

INSIDE STATUS

Specialised Certificate Course in Software Quality Assurance and Management

As part of its ongoing commitment to quality software and transfer of skills, WARCC is presenting certificate courses in software quality assurance (SQA).

The Centre has been active in this area since 1987 and currently provides a range of services which includes training. Seminars and workshops on SQA techniques are conducted regularly by the programming Services group which was requested by the Software Quality Assurance Association to present their course.

It is the first full SQA certificate course to be developed in Australia and is already in use in New South Wales and also in Queensland, where it is recognised by the state government.

The first course will be presented at The University of WA for 10 days fulltime in February 1991, followed by a second course in the alternative format of one night per week for 24 weeks.

To obtain the certificate, registrants will be required to pass an examination set by a Board of Examiners from academic, industry and government bodies.

The course is being presented following consultations with the ACS, AOQ, Ministry of Economic Development, the IT Watch Committee of State IT, the Australian Information Industries Association, the Electronics and Information Industries Chamber and Standards Australia.

Although the material was produced at Griffith University and is standard for courses across Australia, the lecturing staff have been drawn from The University of Western Australia, Curtin University of Technology and government departments.

For further information on the SQA certificate course, the course instructor, Terry Woodings, can be contacted by telephone on 380 2618 or fax 380 1011.

Micro Rentals—the Advantages

'It is also a solution when funding is limited, as organisations receive support without the expense of maintaining in-house support staff and they benefit from cost savings as monthly payments enable them to spread outlays more effectively.'

The opportunity to trial equipment is a further advantage of rentals. Demonstration units are provided by suppliers for a single day but customers often require more time to judge whether a piece of equipment is worthwhile or not.

Rod Beresford, relieving consultant monitoring standards in education at the WA Ministry of Education, is a typical MCS rental customer. Without an additional machine at a particular time, he would not have been able to complete his assignment on time.

'We had a need for a computer with a large amount of memory to run a highly sophisticated program written for Apple.

'Purchasing a machine would have been a slow process as there is a quota system in place at the Ministry. Renting was a quick and easy way to get a machine when we needed it and for as long as we needed it in order to meet our deadline,' he said.

'For us renting a computer for the duration of the assignment was a way of being more effective in doing our job, as it enabled us to maximise efficiency without maximising expenditure.'

For Greg Rowse, Employment Officer at the Fremantle Migrant Resource Centre, rental of a computer and laserwriter enabled provision of essential secretarial support during two job-search programmes, both run for a period of several months during 1990.

Additional secretarial support was essential for both job-search training courses which took place away from the Fremantle Centre. Course participants required assistance with the preparation of letters of application and resumes but existing resources could not be stretched to meet this need.

'Renting computer equipment provided us with a solution and, as a consequence, migrants attending the job-search training courses were able to receive the secretarial support they needed,' Greg said.

After purchasing a computer, the owner incurs costs relating to maintenance, replacement units, depreciation and asset management. In comparison, the customer who rents a computer from WARCC's Microcomputer Support group has no such worries as support for the whole machine is provided.

For many users rental is a preferable, hassle-free option.

Multi-user System Stops Headaches

Mark Davies, Nimrod Service Manager, pictured (centre), with WARCC consultant Penny Dufty and Nimrod technical expert George Vaskovics
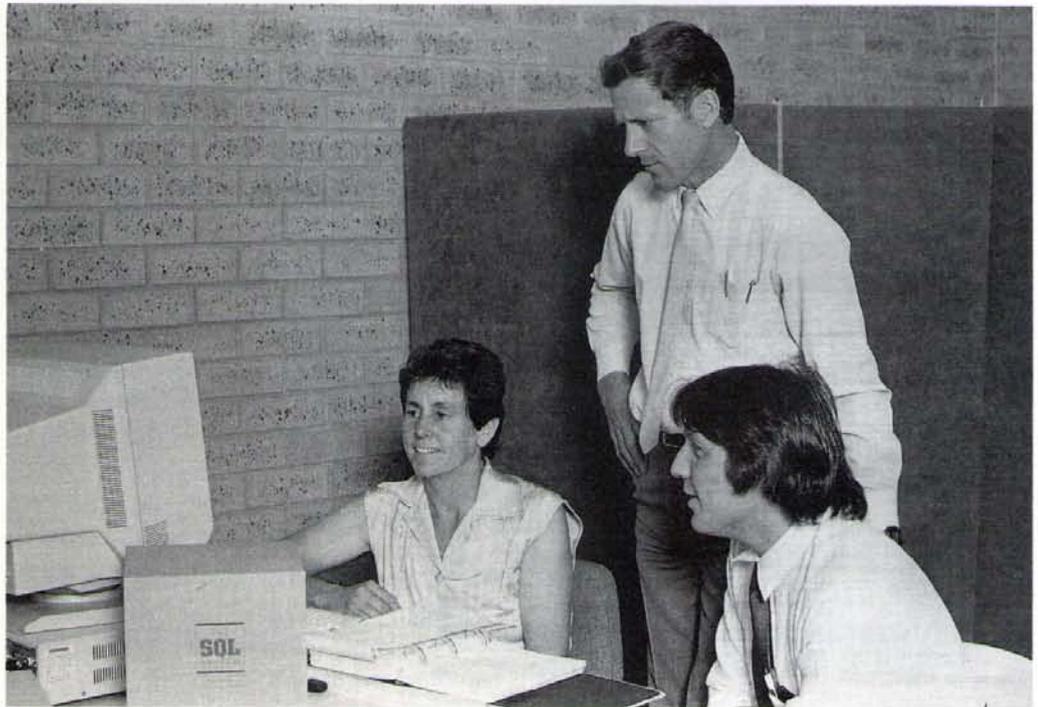
Mark Davies, Service Manager at Nimrod Computer Services, is delighted with the potential of the company's new service management system which was designed jointly by George Vaskovics, Nimrod's Research and Development Engineer, and WARCC consultants Penny Dufty and Kristina Lam.

A wholly-owned Western Australian company, Nimrod operates in computer manufacturing, sales, third party service and maintenance.

Founded in 1979 by Nimrod Thomas, its director, the company assembles all its desktop range of personal computers locally and specialises in Novell networking.

The company's major clients include the WA Ministry of Education and the Australian Federal Police in Canberra.

The multi-user system was developed for Nimrod's Victoria Park facility where hundreds of computers are serviced each week.

Project leader, Penny Dufty, explained that WARCC's task was to develop an application to replace the existing service management system using SQL.

As Nimrod wanted to standardise future developments, the team selected SQL Windows, which runs under Windows 3.

'When we started to design the system in July last year, we looked at a number of products before deciding that SQL Windows met all the client's requirements,' she said.

In the past Nimrod had run SMS, a Cobol-based database system. This proved too slow for efficient recording of customer requests on-line.

Another system was then produced to record current jobs while details of all contracts were logged on SMS.

This second system enabled operators to enter information quickly when receiving customer calls but once the job had been completed, the information had to be typed in again on SMS for job history statistics.

For Nimrod the system proved to be frustrating and inadequate. Mark Davies summed up the company's dissatisfaction: 'It was a laborious system as it was slow to give information on outstanding jobs and also for any form of sorting. In addition, it did not provide enough statistics—the kind of information needed today in order to remain competitive.'

Best Wishes for a prosperous and successful New Year
from the management of WARCC
(from left to right) Dennis Fowles, Alex Reid, Len Walker,
Carole Herriman, Terry Woodings, Phil Dufty, Rob van
Zanten, Tony Hoar, (Assistant Director Kevin Collins
absent on long service leave)

WARCC—the First for Outsourcing

WARCC is poised at the start of 1991 to cement its role as the premier "outsourcing" supplier of computing services in Western Australia.

This is the most significant outcome of the year-long review of computing which the University of WA completed towards the end of 1990.

The review examined the means for providing computer support to the University and the ongoing role of WARCC, both within the University and in the wider community.

The review concluded that WARCC needed to be given an unequivocal mission to be a provider of computing services, to all possible customers, op-

erating along commercial lines. To date, WARCC's mission has included some obligation to provide certain partially unfunded services to the University. These services will now be directly and completely funded by the University, and a separate small unit set up to provide them.

Thus the Centre will be able to focus solely on providing services on a "fee-for-service" basis, allowing it to consolidate its position as the foremost computing service provider in the state.

In due course, WARCC's renewed financial strength and clarity of focus will also result in extended and improved services to all its clients.

This clarification of mission is a very timely one. Many government and private organisations are currently under enormous pressure to improve the effectiveness of their spending on all forms of Information Technology. This is leading to a very serious examination of alternative means of acquiring computing services. Currently, the predominant approach is to provide most services in-house.

Increasingly, however, organisations are finding that acquiring some or all of their computing services from outside

Technology Moves On

WARCC's only remaining mainframe computer has reached the end of its productive life and will be powered off very shortly. Its departure is a consequence of the dramatic technological changes of recent years.

Although the Centre no longer owns any mainframes, its fundamental business - that of sharing computing expertise - remains unchanged and it does house and operate several mainframes for various clients. However, for some, the decommissioning of the last mainframe marks the end of an era, for it was the acquisition of the first Cyber in 1972 which led to the establishment of WARCC as it is today.

Dennis Moore, WARCC's first Director and currently Professor of Computing Science at Curtin University of Technology, summed up the significance of the Cyber: 'The important thing about the Cyber is that it was the right machine at the right time and brought large-scale computing to Western Australia. Government and academia cooperated and were therefore able to access computing facilities they would not have been able to afford otherwise. In short, it was a win-win situation, one from which everyone benefitted for an extended period of time.'

Norm Hall, Principal Research Scientist at the Western Australian Research Laboratories and a long-term Cyber user, described some of the benefits it provided : 'The main thing is that we got support when we needed it. The facilities were very good indeed and allowed us to do the job.'

'In addition, response time was excellent, so we were able to keep our costs down. Without these facilities we certainly would not have achieved as much as we did and we are extremely grateful.'

In the early years, during which demand for access burgeoned, virtually all of the Centre's business related to supporting use of the Cyber which had several remote batch stations. There were, of course, occasional hitches. For

WARCC Director, Alex Reid, with some Cyber memorabilia

The Cyber brought large-scale computing to WA for the first time in 1972

example, construction of WARCC's premises was already well underway when it was realised that space for a motor generator had been omitted from the design of the computing hall. It was decided to put the generator in a broom cupboard where it has remained ever since.

In 1979 the Cyber still accounted for over two thirds of the Centre's revenue but ten years later it provided a mere 5 percent and usage was declining. As a result, WARCC had to examine very closely the kind of business it should be involved in and how best to service its clients.

Director Alex Reid stated that a lot of effort had been put into positioning WARCC in the right marketplace to ensure that it could continue to meet the growth and diversification of demand for access to computing expertise.

'The Cyber gave us many good years but technology moves on. Like other computing centres we have been driven by technological developments. I believe WARCC has adapted well to the rapid changes which have taken place in the past few years and is now well-placed to meet the challenges of the future,' he said.

Training Activities to Expand

Tony Hoar, manager responsible for WARCC's training services

Tony Hoar, manager with responsibility for training at WARCC, believes that the Centre's reputation for quality presentations and its expertise in the technical computing arena are both valuable for the expanded training programme planned for 1991.

The Centre has pursued a policy of limited class sizes and a strong emphasis on "hands-on" participation and skills development in its computer training courses in order to distinguish them from others on the market.

'WARCC is recognised as having specialist skills in technical and research-oriented computing and in the use and programming of Macintoshes. Our policy is to concentrate training efforts in these two areas,' Tony said.

In 1991 WARCC plans to increase the number of *specialist* courses in technical computing areas, including Unix security, networking security and advanced Unix techniques, and *general* courses in popular microcomputer packages available for the IBM PC, Macintosh and Unix systems.

In addition, the Centre will continue to provide *customised* courses for specific organisations.

For specialist courses, in particular areas of information technology, WARCC usually brings in a recognised expert. For example, Chris Maltby, who has been involved with Unix since its first use at the University of New South Wales

and has also worked with most versions, presented the very successful Unix-related course *Introduction to TCP/IP* in August 1990.

Customised training courses have been developed for a range of organisations including Transperth and the WA Department of Agriculture. In some cases the customer had large numbers of staff involved in research-related activities and therefore specific requirements, while in others the organisation was in the process of introducing Macintosh computers to staff or moving into a Unix or Windows environment.

General computer training courses conducted by WARCC attract attendees from all walks of life. These courses are offered as part of the support service available to users of micro computers. Training is mostly related to the use of specific software packages or computer systems and cover common packages such as *Introduction to the Macintosh, Word, Excel, Pagemaker* and *Hypercard*.

Other training services include rental of videos covering a range of software products for the Macintosh and also individual tuition.

For further information on computer training courses conducted by WARCC, Tony Hoar can be contacted by telephone on 380 2627, or fax 382 1688.

WARCC—the First for Outsourcing

suppliers ("outsourcing"), is providing them with very substantial benefits. Significantly, the leading benefit is the direct cost saving that can be made. (15 percent savings seem to be fairly typically reported).

Added to that are higher quality and professionalism in the provision of services, increased flexibility in how and when to expand or shrink services, and a management that is free to concentrate on the primary business of the organisation.

WARCC has been such a quality outsourcing supplier to the WA community for almost 20 years.

It provides a wide range of relevant services, including computer project quality management, software writing, renovation, and validation, specialised computer processing, and facilities management.

We look forward to building on our reputation for outsourcing during 1991 and beyond.

Alex Reid
Director

Multi-user System Stops Headaches
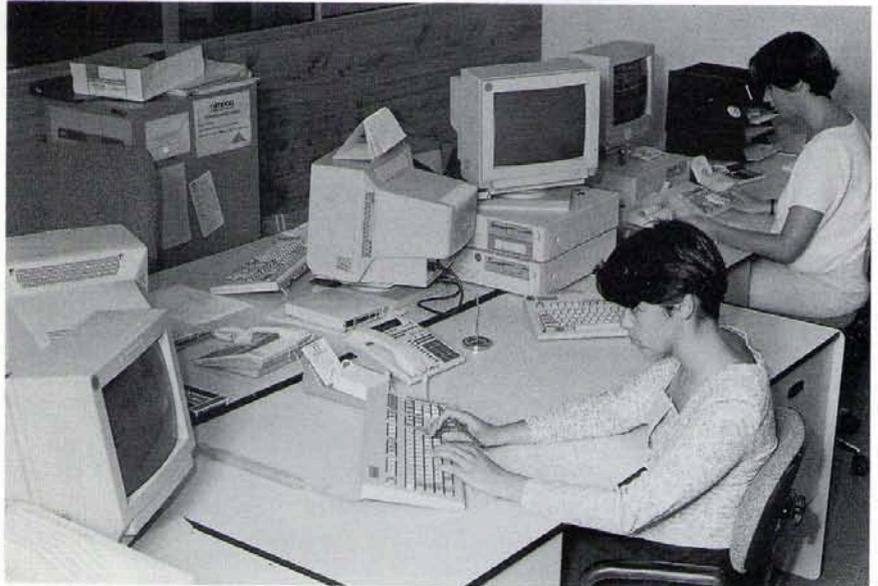
The new service management system provides Nimrod operators (pictured above) with greater control over their work

What was needed was a user-friendly system which would be faster, easier to use and would provide more information.

Mark is confident that the company now has a system which satisfies these criteria: 'Our new multi-user system is designed to meet these needs, as up to six operators can use it at any one time.

'When receiving calls, they need only use a few simple commands to obtain details about a customer - how many machines, how old, need for spare parts, and so on.'

George Vaskovics pointed out that use of SQL Windows enables client stations to talk to the database.

'The database activity runs on the server and this will probably be the way multi-user database applications will develop over the next few years,' he remarked.

Mark was also enthusiastic about SQL: 'This is really front-end technology. In the Windows environment users can access the mainframe database - effectively mainframe capabilities are brought down to the PC market.

'For our operators the new system means much faster access to information and fewer headaches. The graphical user-interface provides them with greater control and flexibility in their work.

'For myself, the system offers the advantage of much more detailed statistics on trends in the computer repair industry.'

News and Views from Silicon Valley

Michael Scriven is a UWA Emeritus Professor who edited a newsletter for University staff for several years. He now runs an Evaluation Institute in Palo Alto, California. This column gives some extracts from Professor Scriven's recent comments on what is happening in Silicon Valley.

Non-Stop Microcomputing

In the fight against interruptions to - and loss of - computer work there are three possible approaches: (i) increase redundancy, (ii) increase reliability, and (iii) improve repair and relief. There have been some recent improvements. But don't let the new developments delude you into carelessness about thief-proofing and backing-up.

(i) Redundancy: In the mainframe world, Tandem has made a great deal of money out of creating computers with dual processors, drives and controllers working in parallel so that if one component crashed, a full duplicate system was still running. A costly approach, but less costly than a crash— for banks and insurance companies and governments. In the micro world, no Tandem has emerged because no-one is running banks and armies on micros. Of course, basic redundancy consists in making extra copies of your work. How best to do it?

Increasingly, "power users" are using hard disks as back-up instead of tapes or floppies, not just because they do the job much faster, but because they provide you with a useable substitute if the main disk crashes. The price is comparable to tape unless you are backing up many times the content of your main hard disk; then removable hard drives or disk cartridges are the preferred approach. The removable drives are the most reliable and the most expensive.

Nisus, the Mac word processor, makes a back-up copy to a second drive after any number of keystrokes, as well as one to the same drive, so that you can't lose more than a few minutes work. Most computers can be set up the same way by using a cheap macro program. Nobody seems to be doing it yet, but it would be even better if hourly or daily back-up to an offsite machine was also automatic.

By extension, one does even better with a back-up computer, even if not connected in parallel, provided you're backing up frequently. The value of a laptop as a back-up computer, perhaps offsite, is often enough to justify the purchase of one, given the other payoffs.

(ii) **Reliability**: Despite some problems about the survey design, it's a reasonable inference from the recent pathbreaking PC Magazine survey that the absolute reliability of different brands is not very different and not very good - around 40% of machines having problems every year. Of the well-known MS-DOS brands, Hewlett-Packard led the pack and NEC also did well.

There is clearly a great deal of room for improvement here and the best path for Apple would be to slow down on new models in favour of developing a 90% reliability record against that 60%.

Many of the mail-order brands did nearly as well and of course cost much less; but the reason people are moving over to them in droves is because of their large advantage on the third of these three points.

(iii) **Repair and relief**: are terms used here to include any remedy for trouble other than planned redundancy or making products more reliable, including help and simplifications which prevent problems. I'll try for a systematic listing here, because I think we're seeing a new phenomenon, the 'support revolution'. (1) "Plug and play" ie elimination of set-up and start-up problems. (2) 30-day money back guarantee, no questions asked; this has a marvellous effect on the honesty of sales people on reversible commission. (3) One-year parts and labour warranty, on a carry-in basis, with next-day on-site service available to city-dwellers for a modest payment. (4) 24-hour, seven-days-a-week, free telephone help from qualified people. (5) Sundry substitutes, much better than nothing: fast fax query service, fast electronic bulletin board service; use of 'mirror technology' so the technician can see your screen on his or hers; 'cross-over' mailing of parts to country customers, so that as soon as the need is diagnosed, the part is shipped by the factory, not waiting for your defective part to arrive.

This takes most of the pain out of computing. You're not getting this kind of support? Start insisting on it. The speed with which this revolution arrives in Perth will depend on how many people do insist on it - and buy only from those providing it.