



Extended Case Study

Botanical Resources Australia Pty Ltd

Botanical Resources Australia Pty Ltd

(BRA) is a Tasmanian-owned and managed company involved in contract growing, processing, manufacturing and exporting pyrethrum products. The company is the world's most efficient and technically advanced producer and the second largest supplier of these products. It supplies natural pyrethrum products to world markets for use as the key ingredient of domestic and industrial pest control formulations. About 200 mixed cropping agribusinesses are contracted to grow pyrethrum for BRA. The organisation aims to be the world's most significant pyrethrum business.



Electronic commerce opens doors for Tasmania's pyrethrum industry

Not long ago, a large number of Tasmania's 200 pyrethrum growers had little knowledge of how to use computers, let alone the world that opens with access to the Internet. A project funded by the Tasmanian Electronic Commerce Centre Pty Ltd, BRA and 75 participating growers has changed all that. In February 1999, growers had computers and software installed along with modems and access to the Internet through Tasmanian Internet

Service Providers (ISPs) for such things as email, electronic newsletters and product information.

The TECC provided funds to support this project because it presented an opportunity to form a network of rurally-based agribusiness operators who could show the potential benefits and opportunities of using electronic commerce in their businesses.

The project has benefited the growers and BRA and the feedback from everyone involved has been extremely positive.

Benefits for pyrethrum growers

Growers benefited from this project through:

- training at TAFE on basic computer operations, software and the use of email and the Internet;
- learning about the effectiveness of email;
- access to information for all the crops grown on their properties;
- ability to source and order agricultural products over the Internet;
- learning about how easy it is to use Internet banking; and
- learning about benefits of farm financial and management software.



Training at TAFE



Before training began, the computer knowledge of participants was spread through three broad categories, namely those with:

- little or no computer experience (most of the growers);
- some knowledge of computer operations but little or no Internet experience; and
- a fair level of computer and Internet operating skills.

Growers, their family members and farm workers learned how to use the software, email and the Internet for the benefit of their farm businesses. This was especially so for those who had little or no computer and Internet experience. Growers discovered that the technologies, once they had mastered the operations, could streamline their operations and save them time and energy. It also helped them realise that by adopting electronic commerce they could reach world's best practice and be highly competitive in their businesses.

Diana Wade and her husband Nigel run a mixed crop and stock enterprise at Table Cape. Diana had some experience with computers, running an accounting package for their financial records, but none on using the online environment before the project began. Diana and Nigel found the training at TAFE was excellent, giving them the skills they needed to operate their software and access email and the Internet. Neither of them find the technology scary any more. Diana says email is very useful for communicating with BRA, other businesses and her children. She loves the immediacy of this form of communication. Diana and Nigel also find the Internet is a valuable source for crop, stock and weather information. They haven't started using Internet banking to its full extent yet, but anticipate they will in the future as a part of their business expansion. Diana and Nigel now maintain all their farm records on PAM2000 and they anticipate that it will improve their farm management practices in the long term.



Email facilities

The benefits of having email facilities were shown in three main ways. Growers found BRA's 'Pyrethrum Industry Electronic Newsletters' were informative about the cropping season, the latest results of research and in helping them plan their activities. The feedback reported in the newsletters by growers and BRA on the progress of the

electronic commerce project was useful, particularly in relation to the more advanced software packages tested by a few of the participants. Participants saw the opportunities and value of electronic commerce and many started using some of the more complex electronic commerce facilities to help them run their businesses.



Email has been useful for communicating with field officers of BRA and, to a lesser extent, with Tasmanian suppliers and processors. Growers indicated that they still used the phone, face-to-face meetings, the postal system and faxes for most of their communication. However, as the growers, processors and suppliers see the benefits and become more familiar with the technology, the use of email is expected to increase in the future.

A number of growers and their families have begun using email to communicate with other members of their families or to write letters to their friends around the world. They find it a convenient and fast medium to use.

Peter Skirving, who runs a mixed crop and stock farm near Devonport, was completely computer illiterate before he joined the electronic commerce project. The weekly training sessions at TAFE gave him the basics and he now has learned to operate software, use email and access the Internet. He found it all confusing initially and is still battling to become proficient. Nonetheless, he uses email for some of his business communications. Peter was part of the pilot to use the PAM2000 software and finds it really beneficial for producing accreditation certificates for his produce, saving time on the manual process he used in the past. He hasn't tackled Internet banking yet but anticipates he will in the future.



Jim Oliver, a mixed cropping and stock farmer from Sassafras, was not computer literate when he joined the electric commerce project. In fact, he never thought he would learn about computers or online technology. He wasn't keen to join the project initially but was talked into it. Now he's extremely grateful! The training at TAFE gave him a handle on basic operations of computers, software, email and the Internet. He found it confusing to absorb at first, but with time he's managed to consolidate his knowledge. He now has records for two businesses and an investment portfolio on computer and uses the Internet frequently for stock and weather reports. He plans to learn about Internet banking and anticipates that in the future he'll do his banking over the Internet because he believes it will be more efficient than the way he is doing his banking at present.

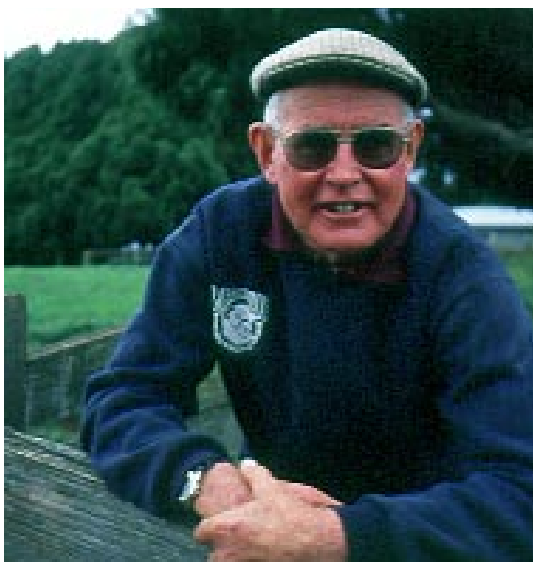
Information and products from the Internet

The growers had substantially increased their use of the Internet as a useful additional source for obtaining information. They did anticipate their use of the Internet would increase as Tasmanian suppliers and processors set up websites with information on the products they make or supply.





Alec Loane, a mixed cropping farmer from East Devonport, had no computer experience before this project began. Encouraged by BRA and his wife Barbara, he became involved even though he was somewhat terrified at the prospect of having to operate the new technology. Alec doesn't regret it now. He says email is a wonderful tool and has found it very helpful for getting quotes from suppliers. He now wishes more people were online and is encouraging his friends and associates to do so. The project spurred Alec and Barbara to complete their taxation at home for the first time! Alec plans to use Internet banking and the more sophisticated software packages to improve the efficiency of his business in the future.



Internet banking

A few growers started using Internet banking during the project, making the banking part of their business less time consuming and more efficient. They can conduct all their banking operations from their farm offices using their personal computers. This includes paying all their creditors online, which saves costs on cheques and postage stamps. In addition, bank statements can be downloaded and fed directly into their financial packages for automatic reconciliation, a process most growers find laborious and difficult.

Many growers indicated that they expected to use Internet banking to streamline their operations in the future.



Farm financial and management software

A pilot group of growers had 'Quicken', a farm financial management package, and 'Paddock Action Manager 2000+' (PAM2000), a farm management package, installed onto their computers and were trained in using the software. The feedback from growers was positive, indicating they were useful tools for managing farm finances and their day-to-day farm activities. The financial package is particularly useful when used in association with Internet banking because statements can be loaded directly into the program. The information does not need to be typed in manually, reducing time, effort and errors. Growers found both packages were easy to learn and use.

Kevin Goodwin, who runs a mixed cropping enterprise at Forth, was experienced at using computers and was connected to the Internet when he joined the electronic commerce project. He started to do his banking on the Internet using the Commonwealth Bank's Quickline package. Kevin says it's saving him time and money and in addition he's able to do his financial transactions when it suits him, 24 hours a day. He's also using Quicken and PAM2000, both of which have improved the way he manages his property. He says he's saving huge amounts of time now that he can download bank statements for automatic reconciliation in Quicken. He also says it's amazing what PAM 2000 can do and finds the Quality Assurance Reports the software generates particularly useful for selling his produce. The BRA project has given him confidence to do what he was trying to do. Without the program, he says, he'd still be in the dark ages.



Benefits for BRA

BRA, which aims to be the world's most significant pyrethrum processing business, benefited from this project through:

- a more efficient grower base from being more technologically aware;
- improved communication between BRA staff and growers;
- improved computer skills of field staff; and
- a website to promote its products.

A more technologically aware industry

The growers who participated in this project saw how they and BRA benefited from one form of technology. They no longer 'fear' new technology and change and are more likely to accept other sophisticated technologies developed to improve the performance and profitability of the pyrethrum industry in Tasmania.



John Bonney, runs a mixed cropping enterprise near Forth and had experience with computers and the Internet before joining the electronic commerce project. He found he gained more skills in operating the software, email and the Internet from the training at TAFE even though he thought he was a reasonably competent operator before that time. He also met many new business associates at the training who are now a continuing part of his business network. John says he now finds email more useful than the phone because it's cheaper and he has a written record of his communications. He's started using the online banking services of the ANZ and Commonwealth Banks and aims to conduct all his payments online in the future. He believes it will be much more efficient, saving him up to half a day a week on his present operations.

Improved communication

More than a third of the growers contracted to BRA were put 'online' during the project. This has allowed BRA staff to communicate with growers by email and to produce regular electronic newsletters containing useful information for growers, such as field data, harvesting schedules, results of research conducted by the organisation and information on meetings and field days. It has also provided an avenue for growers to send photographs to BRA quickly through the email. This more direct and more frequent communication has improved relationships between growers and BRA's field staff and increased the speed with which BRA can help growers sort out any problems they have with their crops.

Apart from improved communication with growers, an interactive message system at the organisation's website ensures anyone can contact the organisation from anywhere in the world at any time. This form of written communication is much faster than the traditional mail system. In addition, it has made contact with international buyers easier by removing the need for phone calls across different time zones.

Improved computer skills

BRA staff were closely involved with the computer training provided to growers as part of the project. This has improved the staff's computer and software operating skills, saving the organisation time through staff proficiency. In addition, they are able to help growers with any problems they have with their systems, again strengthening the bonds between staff and growers.

Website

BRA established a website as an additional medium for promoting the advantages of pyrethrum products grown and processed in Tasmania. The organisation now promotes throughout the world information on product quality, reliability of supply, ability to formulate products to customer

requirements, the worldclass technological skills base supporting the production and manufacturing operations and the general clean and healthy environment for growing pyrethrum in Tasmania. The site provides exposure 24 hours a day without the need for extra staff or advertising overheads.



The site will also allow BRA to promote other botanical plant extracts and products that will be available for distribution in the future.

Managing the BRA project

Funds for the project

TECC provided \$108,000, which covered about two-thirds of the costs for all activities in the project. The funds contributed to training, purchasing and installing computer equipment and software, initial access to the Internet and compiling a comprehensive email and website directory of growers' primary business contacts. Growers contributed \$43,000 towards the costs of computer hardware and those who trialed the Quicken and PAM2000 software also paid part of the costs of the software. BRA provided more than \$20,000 to manage the project, establish its website and provide staff to train growers.

Establishing a working group

A working group consisting of three members of the Tasmanian Pyrethrum Growers Commodity Group and three members of BRA was established to manage the project. It met regularly and was responsible for selecting the growers to participate in the project, conducting an audit of growers' computer equipment, selecting the IT consultant to supply standardised computer equipment, arranging training at TAFE, employing an additional consultant to support growers and arranging training in Internet banking, a farm financial management package (Quicken) and a farm management package (PAM2000).

Selecting growers

All pyrethrum growers in Tasmania were asked by letter to express their interest in participating in this electronic commerce project. A total of 75 growers subsequently agreed to participate in the project. Participants signed contracts agreeing to:

- participate in key exercises associated with the project for the first six months;
- respond to and participate in TECC and BRA key surveys;
- ensure that all equipment supplies were available for use in network project activities when required;
- contribute to the objectives of the project, which were to demonstrate the key benefits to agribusiness operators of the adoption of online and electronic commerce practices; and
- assist those responsible with researching and documenting the project as required.

Selecting IT specialist and installing equipment

Master Business Systems (MBS) was selected from 19 organisations that responded to the publicly advertised tender to supply and install computers and software and provide basic computer training. MBS was selected on the price it quoted, its ability

to provide backup support through helpdesk and modem facilities and because it had Microsoft Certified Specialists who had direct access to Microsoft technical support. The company visited the 75 participating growers and installed complete computer systems for 43 growers and part units, such as Microsoft Office 97 and modems, to the remaining 32 participants. Those participants who did not have access to the Internet were connected through Tasmanian ISPs. MBS completed its task within the specified timeframe and provided backup when needed. The organisation was found to be capable and reliable.

Basic training

All participants went to 17 weekly sessions of three hours at local TAFE venues for training in word processing, spreadsheets, databases and using the Internet for finding information and using email facilities. In addition, a specialist consultant was contracted to provide support for growers who needed extra help. The consultant's role was completed after the training at TAFE finished because most growers were competent at basic computer operations by that stage.

Advanced training in specialty software packages

After the TAFE training had been completed, a small pilot group of growers was established to develop new ideas and procedures on electronic commerce and then to show other growers the benefits of these developments.



'Quickline'

The first task was to examine the benefits of Internet banking. Representatives of the Commonwealth Bank and the ANZ Bank attended a growers' meeting to point out the technical capabilities, benefits, features and cost effectiveness for growers of their Internet banking packages. The favoured package was the Commonwealth Bank's 'Quickline', a modem-based electronic transaction and payments software package that allows customers to access bank statements, transfer money between their own accounts and transfer money to any bank accounts in Australia from their personal computers. The major benefits are 24 hour access to accounts and overnight payment of creditors or other payees with cleared funds. The cost savings compared to normal cheque transactions are significant and overall the system is a quick and cost effective alternative when compared with normal banking procedures. Bank statements can be downloaded and entered directly into financial packages for automatic reconciliations. It is compatible with the other major accounting packages such as MYOB and Quicken.



'Quicken'

Twenty growers attended a training course on Quicken conducted by staff of the Longrenong Agricultural College of the University of Melbourne.

Quicken is a package that covers rural record keeping and rural business planning. It tracks all financial transactions, giving businesses greater control over their finances. It can be used as a cashbook, setting up budgets and for generating a wide variety of reports and graphs. In addition, it has facilities for monitoring debtors and creditors, tracking shares, loans and assets and determining depreciation. Quicken also can determine payroll data.

'PAM2000'

PAM 2000 is farm management software, giving growers the ability to estimate the profitability of paddocks or the whole farm before any crops have been planted. The package is customised by Serve-Ag Pty Ltd to suit individual needs, then installed on-site and followed by training. Fifteen growers had the software installed onto their computers and then attended training by Serve-Ag.

PAM2000 is produced by Fairport Technologies, Australia's leading agricultural software producer. This user-friendly package helps growers make critical farm management decisions based on sound, factual knowledge. Users can monitor their costs per hectare, prepare gross margin analyses, check chemical applications, keep an eye on herbicide resistance and monitor crops as they grow. They can even prepare the Quality Assurance Reports needed by many processors before they will receive produce. A further component of the software is a Geographical Information System that allows users to display farm information on an accurate property map. The system operates by providing layers of information to aid in calculating accurate areas and constructing weekly work plans. All important records can be accessed quickly and easily, making it a useful tool for monitoring individual paddock and farm histories.



Key factors for success

This electronic commerce project was a success because:

- BRA provided strong management;
- special TAFE classes were arranged;
- growers' families participated; and
- growers were urged to maintain their interest and participation.

BRA's management of the project

Brian Chung, BRA's Manager of Research and Development, initiated and then spent a substantial amount of his time managing the project. He continually encouraged growers, particularly those who had little or no experience of computers and the Internet, to participate and attend the training at TAFE by pointing out how they would benefit in the long-term from electronic commerce.

Brian was a leading figure in the working group as he wished to ensure it fulfilled its role thoroughly and effectively. In addition, he went to every TAFE class at each venue to inspire and help the growers and the pyrethrum industry.

Dedicated TAFE classes

TAFE classes were provided at local venues to make it easier for participants to attend their weekly evening classes. In addition, participants were grouped according to their computer, software and Internet experience, which ensured the training was appropriate and interesting for each group. Many of those who attended the local venue training were already friends, resulting in a friendly and social atmosphere and removing the shyness and embarrassment which may have occurred if strangers were grouped together. This approach encouraged participants to attend most classes and to get the most out of their learning experiences.



Participation of families

Whole families became involved in the project, attending the training sessions and then using their individual skills, such as typing and bookkeeping, to help each other learn about computers, software and the online technology. This whole family approach kept participants interested and keen to gain business advantages from electronic commerce.

Maintaining interest and participation

BRA gave the project a high priority. Staff and management constantly urged growers to maintain their interest and participation. The monthly Electronic Newsletters, where BRA and participants provided feedback on progress of the project, also effectively maintained the momentum.

The future

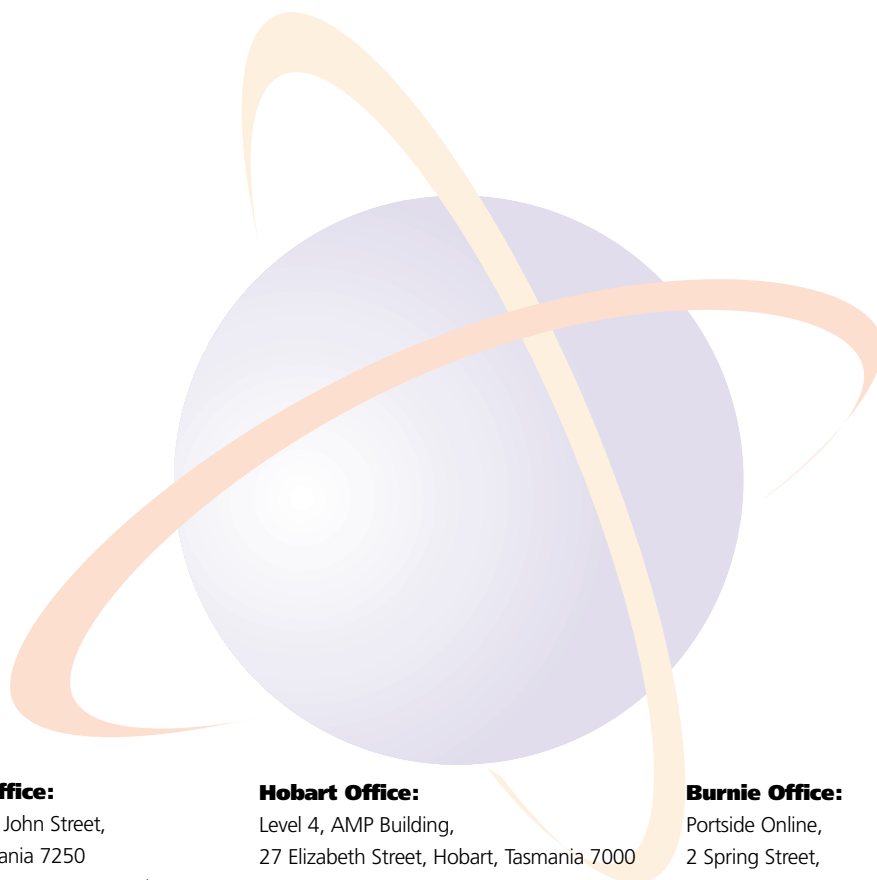
BRA anticipates electronic commerce will have a bright future within the pyrethrum industry in Tasmania. This project ensured about a third of its contracted growers became involved in electronic commerce and each and every one has benefited in some way. More pyrethrum growers are likely to adopt electronic commerce as they see the benefits accruing to those already in the system.



Most of the growers involved in the project grew pyrethrum as one of many crops on their properties. The benefits they received were not confined to pyrethrum, but spread across all enterprises. It is expected that this project will have a flow-on effect throughout the agricultural community in Tasmania.

One of the surprise findings during this project was the number of processors and agricultural suppliers that had not adopted electronic commerce. This is likely to change, and in fact already is changing, as growers ask for access to field officers through email and for information over the Internet.

Copyright Tasmanian Electronic Commerce Centre Pty Ltd 2000



Launceston Office:

Level 3, 42- 48 St John Street,
Launceston, Tasmania 7250
PO Box 1880, Launceston, Tasmania 7250
Tel: (03) 6336 7777 Fax: (03) 6331 0660

Hobart Office:

Level 4, AMP Building,
27 Elizabeth Street, Hobart, Tasmania 7000
Box 1774 GPO, Hobart, Tasmania 7001
Tel: (03) 6211 0400 Fax: (03) 6234 1430

Burnie Office:

Portside Online,
2 Spring Street,
Burnie, Tasmania 7320
Tel: (03) 6431 9923 Fax: (03) 6432 2085

Email: info@tecc.com.au **Website:** <http://www.tecc.com.au>

