Extending the rural enterprise through virtual communities and organisations

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Extending the rural enterprise through virtual communities and organisations

Executive Summary

At the start of this paper, I felt that the rural enterprise had a choice as to whether to enter the realm of virtual organisations and communities or not. In its conclusion, there was a clear direction. There is no choice.

Key issues facing the leading pastoral houses in Australia are outlined including stronger market competition, maturity of traditional products/services, 'too narrow a focus' on the rural sector and lack of customer loyalty.

Background information is then provided on what may appear to initially be a series of unrelated topics but which together, form challenges and a direction for rural Australia. Discussion points surround what rural customers want from suppliers, technology uptake in Australia, information infrastructure in rural Australia, global threats, current policy issues and the notion of virtual communities and corporations.

The paper's intention is to show how virtual organisations and communities can be nurtured to produce solutions for the key issues facing the pastoral houses. Clearly there are some obstacles to overcome in laying the framework for a virtual community. Virtual organisations are one means of aligning what may appear to be market competitors - together - in order to provide this framework.

Once the technical obstacles are overcome, the organisation can concentrate on providing a world's best practice Virtual Farming Community. This could complement the organisation's existing real-world store locations.

1. Introduction

The two leading pastoral houses of the past, Wesfarmers Dalgety and Elders (Futuris), are now entering a new age. Significant factors are pushing them to re-engineer and change the way they have done business traditionally. Factors include:

- Stronger competition due to strengthening positions of independent operators both in an out of Australia;
- Traditional products/services reaching maturity. New products and value added services are required;
- 'Too narrow a focus' being put on the rural, market sector. The rural market itself is a niche area and segmention within it today is difficult; and

• Deterioration in customer loyalty. With more players in the market today, these companies can no longer rely on extended customer loyalty.

In addition to this, the information age has arrived with technology being the key enabler for the foreseeable future. Companies who can apply the ten per cent technology enabler to the 90 per cent business issue will be the industry leaders in the next century.

2. Background

To some extent, the topics in this background section may appear unrelated, however it is important that the reader bare with them as they clearly tie together at the end.

2.1 Needs of rural customers

The rural enterprise only exists for and because of its customers. It is therefore appropriate that a brief review of what their customers want - is given.

A primary producer is not unlike any other customer. His/her broad needs are much the same as yours and mine. See table 1 below.

Table 1

Customer needs						
A world class product or service available when needed						
Competitively priced						
Excellent customer service						
Easy access to vendor						
Free, up-to-date, valuable advice/information regardless of whether a product/service is being purchased at the time.						
Prompt delivery if required						

The key difference, between a primary producer and a city dweller, is that primary producers are dispersed throughout the country which, in the past, has meant that their options for being serviced, have been limited. This is rapidly changing as globalisation occurs and we move to a 'borderless' world not concerned with geographic position. The elements driving this are increased telecommunication infrastructures, de-regulation and worldwide networks such as the Internet.

2.2 Technology take up in Australia

Even more so than the facsimile, Australians have shown an incredible take up rate of the mobile phone and now - the Internet. It suggests that we don't mind change and tend to be early adopters of technology (Alston, 1997a). One reason attributed to this is the geographic spread of Australia. The adage 'necessity is the mother of all invention' is also relevant with the use of technology being turned to all sorts of activities in the remotest areas (Da Rin and Groves, 1996). Eg. medical diagnosis. To some extent, remote communities have no choice but to utilise technology to breach the geographical gap. Plunkett (1997b) re-iterated a comment Wendy Craik (a key lobbyist for the National Farmers Federation) made at a national farm management conference: "Farmers, more than any other single group ... will become even more reliant on telecommunications, as face-to-face contact with their bank managers, accountants, shopkeepers, doctors, teachers and neighbours dwindles."

2.3 Required basic information infrastructure (II) in rural Australia

In this decade, an increase in technological developments, cross-segment competition, reviews of regulatory regimes and II strategic initiatives in several countries has been a catalyst for the emerging expectation of the community to have ubiquitous computing and communications. Increasingly, people are expected to be able to work not just in the office, but from home, in airport lounges, in aeroplanes, in taxis and foyers/receptions of office buildings (Clarke, 1994).

Information infrastructure is made up of three general components; the physical part such as cable and coverage, the support part such as training and advice, and the final part which is the cultural impact such as readiness to adopt technology and understand the business impact. These are expanded on below:

2.3.1 Physical

This requires:

- "* Comprehensive mobile phone coverage;
- * Internet access at local-call rates across the country; and
- * Comprehensive, reliable data line coverage of the state, with ISDN coverage to follow later" (Western Australian Technology & Industry Advisory Council, 1996, p. 4).

Currently, there is a distinct lack of adequate mobile phone coverage for rural Australia. Mobile phones and specifically digital phones are still generally limited to the metropolitan area and some of the larger rural towns. Analog communications still reach further than digital even though I was told by Telstra several years ago that this would be solved eighteen months ago.

Thankfully, companies such as VodaFone, are participating in activities including the worldwide Global Star consortium that will provide satellite-based mobile telephony services across Australia. It is expected that this will start to be rolled out in 1999.

Internet Service Providers have generally steered away from setting up Points of Presences (POPs) in any places other than larger rural towns and the metropolitan area. Internet access is not considered a standard telephone service and therefore doesn't come under the 'Universal Service Obligation' of the telecommunication companies (See section 2.5). As a result, Internet access for the cost of a local call to a large proportion of the rural community, is unavailable.

Table 2 shows the number of points of presence the larger ISPs have Australia wide. It suggests that there is a long way to go before rural communities will have the same access experienced by their suburban counterparts.

Table 2.

State/	OzEmail/	OzEmail	connect.com	Telstra
Territory	Access One			
QLD	12	9	2	7
ACT	1	1	1	1
NSW	6	21	11	10
VIC	16	2	14	5
SA	3	1	1	1
TAS	2	1	1	2
WA	1	1	1	1
NT	1	2	0	1
TOTAL	42	38	31	28

(Points of Presence, 1998; Dialup Telephone Numbers, 1998; Access Points, 1998; Telstra Internet Points of Presence, 1998)

Some farmers currently only have access to Telstra's limited-bandwidth digital radio concentrator system. It is a struggle to get 9600 baud and then trying to use it for data is almost hopeless. (Online to the, 1997)

Despite this, latest figures suggest between 25 to 40 per cent of farmers are on the Internet (Cochrane, 1998). In 1996 sources (Kondinin Group) were stating something like 11 per cent were using the Internet. Extrapolating these numbers, one could argue that most farmers will have Internet access by the year 2000.

2.3.2 Information support services

This requires:

- "* training, advice and general support...;
- * technical services such as computer servicing, software and support;
- * the presence and interest of information service providers relevant to business" (Western Australian Technology & Industry Advisory Council, 1996, p. 2).

2.3.3 Cultural concerns

This requires:

- "* readiness to use new technologies in the operation of business;
- * knowing where and how to get meaningful information; and
- * belief that use of information services such as the Internet can be cost-effective to business" (Western Australian Technology & Industry Advisory Council, 1996, p. 2).

2.4 Global threat

Senator Richard Alston (1997a) summed up perfectly the result if Australia is complacent in its approach to new technology. "We worry a lot about the balance of trade and the current account balance. But with the growth of the Internet there is another balance that we should be watching: the balance of Internet traffic. Are we, as a nation, going to be value-added producers of services over the Internet, or will we merely be consumers of intellectual content which is generated overseas?"

Additionally, in an on-line, borderless economy, previously distant competitors and partners might as well be next door than thousands or kilometres away (Plunkett, 1997a). As well as this, incumbent players must be alert to the threat of competition coming not just from their own industry, but from other industries (Alston, 1997a).

We all have a part to play in making sure that Australia is not just a consumer of intellectual content but a leading generator of it.

2.5 **Issues - Australian policy and relevance to rural communities**

One of the key deterents to rural enterprises forging the way with online activities, in addition to their traditional business, is the distinct lack of adequate telecommunication infrastructure. I have eluded to this in a previous section (2.3.1) but wish to look at how the government, and others, are trying to improve it.

The coalition government seems intent on improving the infrastructure in rural and remote areas. In 1994, "The Networked Nation" report came out. Within that report, several recommendations were made; to provide a national high speed information network, to facilitate the effective adoption of electronic information and communication services in the research and higher education communities, for appropriate ministers to promote and fund the use of global electronic information and communication services, to set up a government task force to promote government's use of information networks and investigate the potential impact of increased use of electronic communications technologies, including Internet-type services, in primary and secondary education (The Networked Nation, 1994).

Some intense lobbying for better telecommunications has been occurring over the last couple of years - a lot of it initiated by the National Farmers Federation (NFF).

In July 1996, the NFF set up a pilot program called Farmwide (of which Wesfarmers were downstream contributors to) to connect 1000 farmers across the country to assess the demand for online services. Online services were provided to the 1000 participants at the cost of a local call plus \$5 per hour to the Internet Service Provider (ISP). The NFF and each of the 30 member organisations provided information as part of the 12 month pilot (which was extended another six months due to the fact that some of the participants couldn't come online in the first 12 months (Prunty, 1998)). Participants provided feedback via four surveys throughout the project (farmwide online, 1996).

6

The key issues which came out of the Farmwide project were:

- the inability to obtain a satisfactory connection due to the quality of the phone line/local telephone exchange;
- high cost of communications due to lack of local call access to the Internet;
- the necessity for cheap and efficient technical support;
- the requirement for timely information such as commodity prices; and
- the demand for online chat and discussion groups. (Farmwide online services, 1997; Cochrane, 1998)

The NFF are now undertaking a further pilot - the Farmwide Rural Access Network (FRAN) programme - to "maintain" the first 1000 participants and offer them further training.

In June 1997, the Minister for Communications, the Information Economy and the Arts, Senator Richard Alston announced an invitation for applications for funding for the \$250 million Networking the Nation initiative. Communities in regional, rural and remote Australia could apply. Approximately \$50 million per year would be available for projects over a period of five years (Alston, 1997b). The government is mainly funding the \$250 million from the partial sale of Telstra. Specifically, (Alston, 1997b) says: "New telecommunications technologies can reduce isolation, provide better access to information and services, increase job and export opportunities, and reinvigorate rural communities, encouraging people to stay in the bush. This program is going a long way to improving the social and economic development of regional, rural and remote Australia".

To date, 93 projects have had funding approved. Applications are considered three times a year and some examples of successful projects include:

• Up to \$329,165 for the Coolah District Development Group. This project seeks to establish local call Internet access for the Coolah district as well as establishing a telecentre in Coolah township and other public access Internet sites at the smaller centres of Cassilis and Dunedoo.

- \$610 000 for avNET this Victorian Alpine Valleys Network project involves upgrading the North East Telecentre communications hub in Wangaratta and installing more points of presence to allow training and support programs for economic, cultural and community purposes.
- Up to \$2 652 317 for the Southern Inland Queensland Area Consultative Committee. This project will establish a community based Internet Service Provider (ISP) providing local call access to southern Queensland. The project will also provide public access centres, training services and on-line information. The area covered is some 28% of Queensland. (Alston, 1998b)

In addition to the Networking the Nation initiative, the coalition has re-iterated its commitment to standard telephone customers living in the remotest parts of Australia. They have been on a 'pastoral call' rate of 25 cents for every 4.5 minutes. In 1998, they will receive a rebate of \$160 a year which amounts to about 10% savings on their average, annual phone bill (Alston, 1998a).

As well as this, and in light of the Telstra sale and the continuing de-regulation of the telecommunications industry, the government has reaffirmed its commitment to the "Universal Service Obligation, which subsidises the cost of providing otherwise uneconomic telephone services to regional areas" (Alston, 1998c, p. 1) and is mandated by law. The government is examining whether the definition of a 'standard telephone service' should be upgraded to include the provision of digital data capability.

Clearly though, local call access to the Internet and more reliable telecommunications are key requirements for there to be a significant uptake of online services in the rural community. Having said this, the government and others, are committed to improving the infrastructure and it is my belief that this is only a short-term hurdle and shouldn't affect any online strategy.

2.6 Telecommunications and the virtual component

2.6.1 Virtual corporations

Various definitions exist however the general theme is that a virtual corporation is when a group of people come together to form a task under an agreed relationship. "The virtual corporation is a temporary network of independent companies--suppliers, customers, even erstwhile rivals--linked by information technology to share skills, costs, and access to one another's markets. It will have neither central office nor organization chart. It will have no hierarchy, no vertical integration" (Business Week, 1993). Partnering will be the key attribute to the virtual corporation. It has been suggested that the greater levels of cooperation amongst competitors, suppliers, and

customers will create a 'grey line' whereby it will be hard to determine where one company ends and the other begins. The consensus is that virtual corporations will be short-lived entities, concerned solely with completing the designated task/s. The corporate desire to maintain specific skill sets and have them lie idle for a period of time will be no more. Everything must be optimised in order to remain competitive. "Cost control is achieved by divesting oneself of non-core business and the virtual company is one way of doing that" (Tunbridge, 1996, pp. 74-76).

An excellent example of a service business, which is in essence a virtual corporation, was outlined by Byrne and Brandt in Business Week (1993). "Consider InterSolve Group Inc., a Dallas-based management-consulting firm that consists largely of four partners. For any given assignment, InterSolve assembles "just-in-time" talent to solve problems or implement strategies for clients...Once a job is complete, the consulting team disbands."

Virtual corporations lend themselves well to small companies and managers who are excellent at networking. Corporates find it harder to branch out into the virtual corporation world because they tend to have a conventional corporate culture. A drawback is that there is a perceived lack of control over some aspects of the task. To develop a successful virtual corporation, you require:

- Each partner to bring forward a specific skill or added value
- Members must have a high degree of trust and understanding
- The focus of the virtual corporation should be on the project
- The virtual corporation rules should be set out up front
- Coordination roles must exist within the corporation
- An administration/contract interface must exist to work with 'non-virtual' clients (Skyrme, 1995).

A key point here is that if a virtual corporation is to succeed, it must by built on trust and cooperation - two items which corporates are quick to dispense with in the real, physical world (The Virtual Corporation, 1992; Trust and the Virtual Organization, 1995).

Virtual corporations therefore raise the notion of virtual teams. Several challenges are presented here because managing a physical team is hard let alone a virtual team. Care must be taken in creating the team, having the right blend of skills and making sure it is small (Skyrme, 1997).

2.6.2 Virtual communities

The Concise Oxford Dictionary, (McIntosh, 1964) defines community as: "an organized political, municipal, or social body; body of people living in the same locality; or body of men having religion, profession, etc. in common".

Rheingold (1993) in his book "The Virtual Community" describes a virtual community as "social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace". However, I think his more accurate account is described in the introduction to his online version being "People who use computers to communicate, form friendships that sometimes form the basis of communities, ..." Rheingold suggests that people in virtual communities do just about everything that people do in real communities.

Rheingold is quick to mention that the technology in itself does not make a virtual community. It must be used intelligently by an informed population. He believes that we need to understand virtual communities and how they affect every important context - including; politically, economically, socially and cognitively. Interestingly though, he points out that the Internet is influencing everyone regardless of whether they want it to or not. If we don't shape the future, it will shape us.

Armstrong and Hagel (1996) breakdown online communities in a more scientific way. Basically, they state that there are four types:

- *Communities of transaction* which allow the buying and selling of products and services. The organiser of this type of community can be a facilitator and not necessarily a vendor. An example of this is an online mall.
- *Communities of interest* which bring together people who interact with one another on specific topics. To some extent, Farmwide have tried to develop a community of interest by having regular chat discussions and by providing bulletin board type metaphor.

- Communities of fantasy in which people create new personalities for themselves or a different environment or story. This type of community is created in online gaming. Statewest.com for instance, have a football tipping competition for the AFL and participants are competing against all other participants to win the money each week. Knowing who you are competing against is irrelevant.
- Communities of relationship which revolve around certain life experiences which are often very intense. With most of these types of communities, the participants are aware of everyone's identity. An example of such a community might be a Cancer Forum. It is similar to real life communities of relationship such as Alcoholics Anonymous. People feel better after expressing their problems around others with similar experience.

Armstrong and Hagel go onto say that an online community which addresses all four of the above scenarios within the same community, offers participants the greatest range of services.

It is worth mentioning some of the criticism of the Internet and how that relates to Virtual Communities.

Spar and Bussgang (1996) argue that there are not many successful businesses on the Internet because there is a lack of rules and that successful businesses require rules. Rather than simply posting web pages, companies should move selectively, building themselves into on-line communities where "rules prevail and commerce can proceed". They say that content providers (such as MSN and America Online) fill this need by "creating customized, managed communities in cyberspace and setting their own standards for on-line exchange." A well managed community would also draw new users on-line.

In a very damning account of Cyberspace, Sardar (1998) stated that an obsession for control and a lack of community and imagination will be the Internet's downfall.

All these criticisms though, elude to the requirement for successful internet ventures to create virtual communities.

2.6.3 Required technologies

Virtual communities and corporations both require the same sorts of technologies. These include:

- telephone;
- facsimile:
- mobile telephones;
- access to the Internet (preferably at local call cost);
- videoconferencing for things like tele-medicine, etc.; and
- in the past, radio communications and television.

3. The connection between pastoral houses and virtual communities and corporations - possible solutions

3.1 Increase the POPs in rural Australia

Clearly, for the rural community to take advantage of the Internet, they require access at a cost effective rate. This access could be provided in a number of ways:

- A change in the "Universal Service Obligation" to state that all Australians will have local call (or at least a reduced rate) access to an Internet POP. This could be a first step for the government instead of concentrating on providing 'super bandwidth'.
- Alliances made with ISP's to help roll out more POPs in rural communities. The sole purpose for this being to provide the basic infrastructure to the rural community.

Wesfarmers Dalgety are already in pilot stages in a relationship with OzEmail Pty Ltd. The basic premise being that one of Wesfarmers Dalgety's strengths is its physical presence Australia wide. OzEmail telecommunication hardware could be located in Wesfarmers Dalgety branches providing a local POP. Wesfarmers Dalgety could leverage off this relationship by also selling computer items such as modems. A key requirement to the success of this is that Wesfarmers Dalgety staff are trained appropriately in order to provide the backup and support.

Other relationships that may be beneficial could include Australia Post, WebPoint and America Online.

Australia Post were reported in March as "considering leaping into Internet service provision, using its extensive physical presence and computer network to provide the nation's most comprehensive Internet service to date" (Davidson, 1998, p. 61) Australia Post are well positioned technologically as they have been rolling out high end telecommunication equipment throughout a large number of their 4,300 post offices. The driving force being to combine its banking network with its data network. Local call access to the post offices would give cheap access to the Internet for the majority of rural customers.

WebPoint have been rolling out Internet kiosks in cinemas, hotels, casinos, restaurants, shopping centres, airports and youth hostels around Australia. Their intention is to continue this basically anywhere where there is a normal phone line and power. Many regional centres are already being catered for.

America Online's Australian plan is outlined below.

• There may be an opportunity to encourage farming associations to set up POP infrastructure. Or utilise rural enterprise's lobbying ability to encourage Telstra to push out more POPs or reduce rates to virtual POPs such as Telstra's DialConnect(R) product.

The Farmwide initiative uses Telstra's DialConnect product to give Internet access to the pilot participants. DialConnect is a '13' number. The cost of DialConnect ranges from 80 cents per hour to \$10.00 per hour depending on your location. Farmwide's investigations have found that an ISP would add a minimum of \$2.50 to the DialConnect hourly charge, putting the average cost of making a local call to the Internet for the majority of rural and remote Australians at between \$8.50 and \$12.50 per hour (Farmwide online services, 1997).

Telstra recently announced an agreement with AOL Australia, a subsidiary of America Online Inc., to allow DialConnect to be used to provide all Australians outside of metropolitan areas with 'their' local call access to AOL's services including Internet access. Costs are likely to fall in line with those mentioned in the previous paragraph. The roll-out was to occur this month (April) but AOL Australia have yet to post any information to their web site (Murphy, 1998; ISP targets rural, 1998). These sorts of relationships should be encouraged.

3.2 Promote the increase of reliable telecommunication infrastructures

Just having an Internet connection will not be enough. Connections will need to have adequate bandwidth as content on the Internet becomes more and more sophisticated.

3.2.1 Encourage ISDN rollouts

As part of the governments analysis of the Universal Service Obligation, they are considering upgrading the definition of 'standard service' to mean access to ISDN. This would require the telecommunication companies to provide access to ISDN, or some other digital service, to all Australians at a reasonable cost.

3.2.2 Encourage cable/satellite/wireless rollouts

Various organisations such as Telstra and OzEmail are either rolling out or are entering relationships to do with providing alternative communication infrastructures to various parts of Australia. These sorts of activities should be supported.

3.3 Educate farming communities to the 'Networking the Nation' initiative

The government is prepared to offer rural communities big dollars over the remaining four years to understand and improve some of their own telecommunication issues. Unfortunately, a lot of rural communities will still be unaware of this and will be disadvantaged as a result. (This can be recognized by looking at the spread of the first \$50 million which has been allocated - a good proportion of the funds have been allocated to projects in Queensland and New South Wales.) The rural enterprise needs to utilise its resources to educate from within and also to encourage farming associations and government contacts to promote the scheme. It may well be useful to get the competitors involved too - even if this occurs indirectly.

3.4 Different revenue making opportunities on the Internet

All opportunities which are mentioned below require a site with high quality content. Summed up in Da Rin and Groves (1996) words "The usefulness of the Internet ultimately depends on content". Most consumers go onto the Internet either to find information or to spend some time doing recreational 'surfing'. They don't go to purchase a product. Clearly, a 'top-notch' site must be developed. The Farmwide and other studies (Stawell, 1996) have shown that the rural community is interested in information such as:

- the weather, ie. forecasts, El Nino, etc.;
- **timely** market information such as wool and commodity prices (this has been seen as the most important need);
- market commentary and outlook;
- news:
- financial such as banking information and insurance;
- environmental;
- educational material including how to use the Internet;
- consumer services such as information provided by the Kondinin Group;
- overseas trade information;
- simulators. ie. Insert type of wool and volume and then calculate price.;
- discussion groups. ie. Online newsgroups or chat sessions;
- real estate (both rural and metropolitan); and
- government.

3.4.1 Subscription based services

Both pastoral houses currently have a web site and there is the potential to create a content rich site with the possibility of charging a subscription for accessing it. This is one opportunity of 'making money' on the Internet but has yet to live up to the expectation. Eg. The New York Times. Internet users have long associated Internet access with 'free' information and this mindset will need to be changed in order for subscription sites to be successful. The rural community will be even less likely to want to pay for a subscription site if the initial cost of gaining access to the Internet isn't cheap. In addition to this, non-profit organisations such as Farmwide are making serious first steps in creating a high quality site for 'free'. Not only do you then have to provide a better site, but you have to convince the users that your site is worth paying for.

3.4.2 Advertising

Another revenue making exercise on the Internet is to sell advertising on 'high quality content' pages. The advertising could relate to any product or service but from a marketing point of view would have to target rural customers. Eg. You would be better off advertising Holden's latest one-tonne ute rather than Porche's Boxter.

The flip-side to this is to not sell the advertising to anyone else but to use the site to advertise physical products/services which the pastoral house sells. The idea being that information is provided in such a way as to streamline their purchase from a physical store. Initially, this may be the way of justifying a content rich site which doesn't attract any direct revenue. Indirectly, it might be increasing physical sales.

3.4.3 Use the Internet to increase customer loyalty

In this growing age of competition, customer loyalty can no longer be taken for granted. Banks are classic examples with customers increasingly moving to the bank/financial institution they think offers the 'best value' home loan or value-added services. To combat this, many customer loyalty schemes have been developed. Examples of customer loyalty schemes include; free gifts after a certain amount of money is spent, 'buy-one-get-one-free', competitions and games, sponsorships, frequent buyer/flyer systems and free coupons. The main advantage of these sorts of schemes is that they provide the ability to create a huge database of customers' shopping habits (Davies, 1996).

Armstrong and Hagel (1996, p. 135) in their "The Real Value of Online Communities" article said this: "We believe that commercial success in the on-line arena will belong to those businesses that organize electronic communities to meet multiple social and commercial needs. By creating strong on-line communities, business will be able to build customer loyalty to a degree that today's marketers can only dream of and, in turn, generate strong economic returns." They go onto say (1996, p. 138) "In the short run, however, businesses that create communities that satisfy both relational and transactional needs will reap the benefits of greater customer loyalty and may gain important insights into the nature and needs of their customer base." Here we are tying the virtual community theme into customer loyalty.

Rayport and Sviolka (1995) in their "Exploiting the Virtual Value Chain" article define the new information world as the *marketspace* to distinguish it from the physical world of *marketplace*. They suggest that the online world can be used to add value and therefore increase loyalty. They gave the example of Federal Express Corporation who introduced parcel tracking to their Internet site. Customers could find out the location of their parcel in a timely manner without having to interact with anyone else.

Committing to an online strategy, however, means committing to providing world best practice services levels. In a recent "Customer Service Bulletin", Phillips (1998) outlined the results of a survey they had done on response times to handling email queries. It was pleasing to see that 46 per cent of organizations surveyed took less than 24 hours to respond but it went downhill from there with eight per cent taking two days, ten per cent three days and four per cent within four days.

The rest simply didn't respond. Coles Myer replied four days later with a "Sorry, we're unable to assist with your request" answer. Rightly so, Phillips pointed out that if you stood in line for four days and had your request answered like that, you would be disappointed. The moral here is to commit 100 per cent to developing customer loyalty and have formal response policies and key performance indicators on which to measure yourself.

Combining the Internet with some excellent back-end databases full of customer knowledge, would allow pastoral houses to identify and target customers needs on an individual basis. This should be on an invitation only type basis and if it was done well, could provide the company with the best possible way of developing customer loyalty. A valued relationship between the company and the customer is developed with the customer feeling that the company is interested and cares about their particular problems (Crowe, 1998).

One last note. Recent research is showing that 'mining' existing customer relationships can be as much as 19 times more profitable. By storing customer data appropriately, a business can better understand the customer needs and then cross-sell to them (Crowe, 1998).

3.4.4 Cost reduction

Following on with the FedEx example 'increasing customer loyalty', FedEx saved money because they reduced the number of employees needed to handle the telephone queries prior to the online tracking system being introduced.

Cost reduction on the Internet generally revolves around the fact that it provides a 'self-service' type of model. Self-service models in the physical world are increasingly becoming prevalent as competition sets in. An example of this is service stations who not only make customers fill their own tanks but also get them to use credit cards at the bowsers to pay for the fuel out-of-hours as well. Another example is ATMs with banks.

Anywhere, where you can force the customer to do some of the work themselves, an opportunity for cost reduction exists. The incentive for the customer to serve themselves is usually flexibility. Eg. With the service station example, customers come any time of the day. Similarly for the bank ATMs.

Another reason is saving time. For example, if the manual process requires phoning say a council, asking them to send out a form in the mail, filling in the form, mailing it back to the council and then waiting for them to process and send back the desired result, an online process could save a lot of 'wasted' time. And the consumer wants this because they ultimately want to get serviced in the quickest, most efficient way. The above example also shows how a number of processes can be re-engineered online to provide fewer processes. The value chain in the above example has collapsed and become virtual.

3.4.5 Sell products/services over the Internet

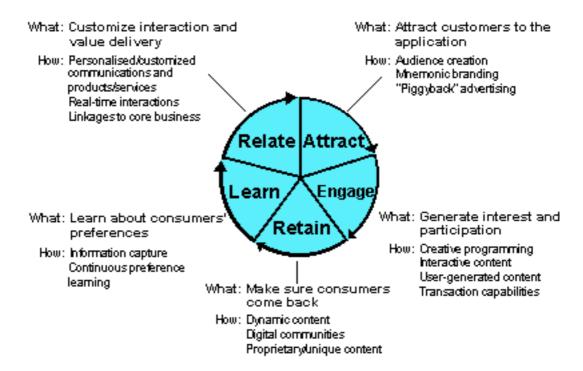
The Internet is an information driven tool and the products/services which are most appropriate to be sold over the Internet is digital information. Digital information requires no physical picking and distributing. The customer can browse online, select what they want, submit payment details (which can be authorised automatically in digital form) and then receive the digital information by email or web browsing - a totally automated system with very low overheads. The sorts of products which fit into this category include books, music, magazines and other published material. A change in the way we traditionally market these products also occurs. With non-fiction books, users can purchase just a chapter, with music, users can create their own 'CD' by downloading their own music titles and with magazines, users can purchase just the articles in which they are interested. One of the differences between physical information and virtual information is that it can be re-packaged and/or sold in an infinite number of ways.

If the pastoral houses ever wanted to enter the realm of publishing top quality information then the Internet would be a great way of distributing it. In fact, this is perhaps another 'twist' on the subscription service. Instead of making users pay for a service they may or may not use - get them to 'pay-per-view' or pay just to get into a relevant section. This requires electronic payment mechanisms such as smartcards capable of accepting small transactions.

In terms of products, the pastoral houses could use the Internet as an online brochure/catalogue and provide customers with the ability to order from the site. The order could then be sent electronically to the nearest physical agency for them to process, thereby leveraging off the physical asset. As yet, online brochures and catalogues have yet to live up to their promise. Most of them are not actually making money. Despite this, one must remember some value-added services can be made with online brochures. For example, sophisticated search facilities within a brochure could allow the customer to find exactly the item in which they are interested without requiring help from a sales assistant. In fact, a customer who might not normally be bothered checking if a product exists in a physical store may try on an online store because they don't physically have to go anywhere or talk to anyone.

Kierzkowski <u>et al</u> (1996) developed an excellent framework for marketing to the digital consumer. Figure 1. outlines it.

Figure 1..



The five success factors are:

- 1. Attract users.
- 2. Engage users' interest and participation.
- 3. Retain users and ensure they return to an application.
- 4. Learn about their preferences.
- 5. Relate back to them to provide the sort of customized interactions that represent the true "value bubble" of digital marketing.

Many of these factors contain elements of discussion in this paper.

4. Strategic direction and recommendation

This paper suggests that the limitations of low cost and better infrastructure, although obstacles currently, should not drive an attitude of 'wait-and-see' by major proponents in the rural industry. Clearly the government has an agenda to resolve these sorts of issues - albeit for a variety of reasons.

Pastoral houses should act now with a multi-faceted strategy. This strategy should combine the following:

- 1. Lobbying the government for a change to the "Universal Service Obligation" to include at a bare minimum cheap access to the Internet and in addition, better telecommunications infrastructure in remote areas.
- 2. Alliances with key industry proponents with a genuine interest in expanding Internet services to the rural community. These include relationships with organisations such as; OzEmail, Telstra, Australia Post, AOL Australia, Rural associations and WebPoint. This is where the virtual organisation concept can take effect. Instead of working against each other, all these organisations could support each other in the short term to provide adequate ISP coverage across Australia. Shared resources would allow the best team to work towards a satisfactory solution. Once this has been achieved, the relationship with this particular goal in mind, is broken.
- 3. Educate rural communities to the 'Networking the Nation' initiative.
- 4. Encourage farmers and the like to utilise the Internet promote its value from within. Train staff accordingly.
- 5. With strategies in place for providing the appropriate infrastructure and encouraging the appropriate audience to participate, the pastoral house should then concentrate on providing Australia's richest source of content for rural communities. Essentially the development of a Virtual Community where farmers can go to get the 'best' information should be produced. This would require aligning themselves with key content creators including; The Bureau of Metorology, ABC, various organisation providing commodity reports, commentary from existing internally prepared publications, internal databases including real-estate and merchandise catalogues, etc. Basically they would need to become the AOL of Australian farm information. In addition, chat sessions with industry spokespeople and other peers who share similar interests, should be maintained. A bulletin board type metaphor needs to be introduced.

The Farmwide initiative would either have to be seen as a 'friend or foe' and a direction, whichever is chosen, clearly laid out.

A recommendation, initially, would be that no subscription be charged for the service with the intent to promote products capable of being purchased from a physical outlet. Even so, if a subscription service is introduced eventually, it should only be to enter certain value-added areas of the community. For example, you wouldn't want to charge potential customers to look up an online catalogue of merchandise.

If new services are being developed in line with other parts of the strategic plans of the company, be aware of the 'piggy-back' capabilities of the Internet site. It may be that the Internet could be a vehicle for that service and that the Virtual Community would add value.

Basically, a very clear direction must be set by the company. If its intention is to become the best Virtual Community for rural users then time, resource and money must be committed and the end result rolled out in very quick stages so as to 'stamp' out the opposition and set an example for all others to follow. On the Internet, it is very easy to be overrun by the opposition. Those that have thrown resources at the concept quickly are the ones currently succeeding.

6. Provide incentive schemes to increase customer loyalty and encourage them to visit the online site. For example 'free' email advice on certain areas of farming. Even a frequent buyer plan could be introduced. Utilise information gleaned from these schemes to 'target' customers online. Make sure policies are in place to react to customer queries in a timely fashion.

With these six very clear objectives, the Australian rural community could benefit from their action in many ways. Whoever takes the lead on this will set themselves up to be the leading pastoral house in Australia in the next century.

This strategy would provide a mechanism to combat the four key issues outlined in the introduction in section 1.

5. Glossary

Bandwidth The term given to the amount of data capable of being

transmitted along a telecommunication line. Normal telephone lines have limited bandwidth capability

DialConnect(R) This is a product put out by Telstra and in essence is a

virtual POP. Users dial a special '13' number and get charged at a special rates depending on your location

Farmwide A non-profit organisation run by the National Farmers

Federation

Information Infrastructure This includes bandwidth, support and cultural

understanding

ISP Internet Service Provider - an organisation who

provides Internet services

NFF National Farmers Federation - a farming organisation

made up of about 30 farming associations

POP Point of Presence - is a dial-in point for customers of a

network service. A local Internet POP means that the customers can connect to the Internet for the cost of a

local call

Universal Service

Obligation is mandated by law and subsidises the cost of providing

otherwise uneconomic telephone services to regional

areas

Virtual community people who use computers to communicate, form

friendships that sometimes form the basis of

communities. Online communities can be made up of

one or more of the following; Community of

Transaction, Community of Interest, Community of

Fantasy and Community of Relationship.

Virtual corporation is a temporary network of independent companies -

suppliers, customers, even rivals - linked by information

technology to share skills, costs, and access one

another's markets.

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