

Advancing with e-Business

AGR Hydroponics

www.agrhydroponics.com.au

The Business



Established in 1995, AGR Hydroponics (AGR) specialises in the design, manufacture and installation of commercial and hobby hydroponic systems. Based in Legana, Tasmania, AGR is a family operation employing three full time staff.

The idea



Managing Director, Arch Robinson initiated the e-commerce strategy in 2000. Arch believed that e-commerce was an essential tool for maintaining future business growth and would contribute to achieving cost savings and additional revenue for the company. Arch implemented the e-commerce solution incrementally with progress from one stage to another determined by the availability of skills, software and finances.

To assist with his e-commerce initiative, Arch utilised his engineering experience and also attended an e-commerce seminar organised by the Tasmanian Chamber of Commerce and Industry. Arch supplemented this by conducting online research to determine what web capabilities should be incorporated into AGR's website.

E-sales



E-sales refers to the selling of goods over the Internet. The most common business model for companies adopting this technology is the "clicks and mortar" set-up. Companies extend their operations to the Internet, but continue to maintain a physical location.

Whilst maintaining physical premises at Legana, AGR have also built a shopping function into company website. This brochure style website, named "AGR Hydroponics Online" provides buyers with detailed product information and graphics. Using online shopping cart software, customers can browse, order and securely pay for products online via credit card. Once the customer confirms the order, the information is saved to an online database. By logging in with a password, AGR views the order and manually enters specifications into their internal systems before the product is shipped to the customer.

The Investment



The initial investment in e-commerce totalled \$15,012, with the majority of this being allocated to the website development (\$5,300) and offline advertising (\$5,500). The shopping cart and accounting software incurred \$500 and \$600 respectively, while setting up the online backup system incurred \$300. Before implementing the solution Arch invested \$600 of his time in preliminary research and \$200 in training to ensure a smooth transition.

Hurdles



Arch found the time and cost of implementation was significant. Arch found quality Information Technology (IT) consultants were difficult to locate and sometimes prohibitively expensive for his size business. Arch managed these issues by implementing the e-commerce strategy incrementally, such that each stage of development was completed by the appropriate level of skills and finance available at the time.

Results



In 2001, AGR generated total additional revenue from e-commerce of \$49,945, with the online shopping facility contributing \$29,259 and \$447 originating from overseas buyers. Additional business generated as a result of online marketing via the website amounted to \$20,239.



Arch Robinson



Cost savings amounted to \$11,190 in 2001. The electronic based system saved the company \$4,000 in photocopying expenses and a further \$500 in postage and freight. AGR were able to conduct more business from the one location saving travel requirements of \$2,940. Communicating via email saved both staff time (\$2,500) and telecommunications expenditure (\$1,000), and the streamlined administrative functions saved bill payment time to the value of \$250. Ongoing costs totalled \$7,178 in 2001. The majority of ongoing costs are associated with system support including staff training (\$300), Arch's time in website updating (\$288) and system maintenance (\$1,460). In addition, capital expenditure is amortised over a four year period (\$3,753).

Customers, particularly those based interstate and overseas have appreciated the convenience of the online shopping facility. With the provision of detailed graphics, product specifications and secure payment facilities, the issues of geography and differing time zones are no longer a barrier to attracting a wider customer base. Currently, AGR believes it is well positioned to penetrate domestic and international markets, being the first web enabled hydroponics retailer in Tasmania.

Future

Further developments of AGR's e-commerce initiative include the integration of the online purchasing system with a new electronic inventory management system at the point of sale. This will allow real time inventory updates and ensure stock levels are optimised to reduce working capital requirements and decrease the incidence of stock outs.

Revenue and Costs

E-commerce Establishment Costs

		(\$)
Web development	5,300	
Staff training	200	
Registration of domain name	180	
Preliminary research	600	
Advertising - offline	5,500	
Advertising - online	132	
Telecommunications	800	
Disaster recovery plan	300	
Additional office furniture	300	
Printing	600	
Software - shopping cart	500	
Software - QuickBooks	600	
Total Establishment Costs	15,012	

Operating Benefit from E-commerce

		2001 (\$)
Additional Revenue from E-commerce		
Domestic Sales - internet based	29,259	
Domestic Sales - other	20,240	
International - internet based	447	
Total Additional Revenue from E-commerce		49,945
<i>Less: Direct Costs</i>	(29,967)	
Gross Profit from E-commerce		19,978
<i>Add: E-commerce Cost Savings</i>		
Postage and freight	500	
Photocopying	4,000	
Staff time: bill payments	250	
Staff time: communication	2,500	
Travel	2,940	
Telecommunications	1,000	
Total E-commerce Cost Savings		11,190
Gross Benefit from E-commerce		42,358
Less: Ongoing E-commerce Costs		
Amortisation of Capital Expenditure*	(3,753)	
Electronic payment systems	(360)	
Website hosting	(372)	
System maintenance	(1,460)	
Telephony	(645)	
Training	(300)	
Staff time - system maintenance	(288)	
Total Ongoing E-commerce Costs		(7,178)
Operating Benefit from E-commerce		35,180

* Note: Capital Expenditure was amortised over a four-year period

For further information on this case study please go to www.noie.gov.au