

Advancing with e-Business

Entech Electro Graphics

www.entechgroup.net



Roger Kolodziej

e-Security



The Business

Entech Electro Graphics is the graphic products arm of the Entech Group. It is involved in manufacturing membrane switches, product decals, graphic overlays and product marking. The company has been in operation for 15 years servicing the industrial electronics market.

Entech Electro Graphics is based in Devon Park, South Australia (SA) and employs 35 full time staff.



The Idea

In 1990, the business initiated the use of Electronic Data Interchange (EDI) to exchange business data and more recently upgraded to more advanced e-commerce applications. Entech aimed to streamline information and data transfer to customers, suppliers and the Computer Aided Design (CAD) bureau. The e-commerce strategy is now managed by Roger Kolodziej, Human Resources (HR) and manufacturing systems manager.

Entech conducted preliminary research by contacting hardware suppliers and consulting magazines. The website is maintained by internal Information Technology (IT) staff.



e-Security

Entech recognises the importance of adequate security controls to support the increasing reliance on web-based business processes. This was highlighted when the company received an email-transmitted virus that caused a loss in staff productivity, and more importantly, loss in communications with clients. To prevent a recurrence of further security attacks, the company has implemented a firewall to control data inflow and outflow from the Internet and installed anti-virus software. Data back-ups are conducted on a daily basis and physical security of the server is also in place.



The Investment

The initial outlay totalled \$41,030. The company allocated \$4,000 to website construction which included integration with the Enterprise Resource Planning (ERP) software to allow customers access to order status information. An additional \$4,000 was spent in preliminary research. Investment in infrastructure to support the online system included installation of the ADSL box (\$1,500), broad spectrum radio hardware (\$10,500) and upgrading of existing hardware and software (\$20,000).

Costs associated with e-security included installation of anti-virus software (\$400) and staff time spent in researching and implementing a firewall (\$630).



Hurdles

At one stage, the online system was infected with a virus that was attached to an email. While the company experienced one day in downtime as a result, the more significant impact was in loss of communication with clients. Entech has since upgraded its security measures to ensure the risk of another system disruption is minimised.



Results

The e-commerce initiative allowed Entech Electro Graphics to streamline its production process and shorten product to market time. Additional revenue of \$240,000 was achieved in 2001 from projects received as a result of customer preference for e-commerce efficiency.



This has contributed \$72,000 towards gross profit.

Cost savings amounted to \$64,300 in 2001. These savings were due to time saved by engineering staff minimizing correspondence time (\$40,000), purchasing staff obtaining supply quotes online (\$7,500), accounts staff using electronic banking (\$9,000) and sales staff in being able to refer customers to the website for product information (\$7,800).

In terms of non-financial benefits, use of email has shortened production time due to expediting the process of sourcing materials from suppliers and the transfer of data between the company and other Entech related business. Customers have responded positively to the e-portal as they are now empowered to access real time details of their orders, shipment and payment status. In addition, use of integrated, online systems in Entech contributes to the company's image as a dynamic and leading edge business.



Future

Following the success of the current e-commerce system, Entech plans to upgrade its ERP software at the end of 2002. In addition, Entech will ensure that adequate systems are in place to support the security of the e-commerce initiative.

Revenue and Costs

		(\$)
E-commerce establishment costs		
Web development - including system integration with ERP	4,000	
Preliminary research	4,000	
Telecommunications - radio link including hardware and upgrades	10,500	
ADSL installation	1,500	
Software - anti-virus application	400	
Hardware and software - upgrading to ensure compatibility with different versions of customer files	20,000	
Staff time - research and implement firewall	630	
	<u>41,030</u>	
Operating benefit from e-commerce		2001
		\$
Additional revenue from e-commerce		
Sales due to proactive electronic communication and expedited production process	240,000	
Total additional revenue from e-commerce		<u>240,000</u>
<i>Less: Cost of goods sold</i>	(168,000)	
Gross profit from e-commerce		<u>72,000</u>
<i>Add: E-commerce cost savings</i>		
Staff time - ease of communication for data transfer	40,000	
Access to a greater range of suppliers - savings from purchasing department	7,500	
Electronic payments and receipts	9,000	
Staff time saved from customer queries	7,800	
Total e-commerce cost savings		<u>64,300</u>
Gross benefit from e-commerce		<u>136,300</u>
<i>Less: Ongoing e-commerce costs</i>		
Amortisation of capital expenditure *	(10,258)	
Internal website hosting and systems maintenance	(15,000)	
Hardware - back-up tapes and CDs	(1,500)	
Telephony - fixed	(1,500)	
Total ongoing e-commerce costs		<u>(28,258)</u>
Operating benefit from e-commerce		<u><u>108,043</u></u>

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

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