

# Advancing with e-Business

## Copytime

[www.copytime.net.au](http://www.copytime.net.au)



### The Business

Copytime is a family company that provides printing services to customers located throughout the Northern Territory. Products offered range from ordinary reports, leaflets and flyers to specialty paper, cards and envelopes. The business also offers online printing and multimedia services such as graphic design and plotting. Copytime is based in Darwin, Northern Territory and employs 26 full time staff.



### The Idea

General Manager, Colin Rhode, required a more convenient method for data exchange between offices and with customers. To this end, a Virtual Private Network (VPN) was established to enable dispersed offices to exchange jobs and to enable staff to electronically access a central repository of company information. In addition, by encouraging email as the dominant form of correspondence, customers can electronically submit job requests, avoiding the need for postage and couriers.



### Virtual Private Network (VPN)

A VPN provides a secure connection between two parts of a network, one end being the office's network and the other end being a computer terminal or gateway to another network. The transfer of data between the two ends is carried through a public network (Internet). An advantage of VPN is that a user could be anywhere in the world and need only incur the cost of a local modem call to an Internet Service Provider (ISP) who securely transfers data back to the user's main network.

Copytime's VPN provides an encrypted connection between the company's distributed sites. This enables staff to securely access credentials and corporate logos from a centralised repository as well as operate printers from remote locations. This flexibility allows staff to work from home or from customer premises.



### The Investment

Copytime invested \$212,000 in establishing the system over a three-year period. The single largest establishment cost was incurred in development of the website (\$50,000). Other costs were associated with the development of the online infrastructure including; database integration (\$30,000), back office equipment (\$10,000) and cabling (\$4,000). Investment in new hardware required to support the set-up included router and hub (\$36,000), data storage devices (\$1,000) and a back up server in the event of system failure (\$20,000). Staff time spent in researching suitable Internet solutions amounted to \$20,000.



### Hurdles

Copytime encountered a number of implementation difficulties due to the inadequacy of the existing Information Technology (IT) infrastructure. In particular, the lack of skilled IT staff proved limiting for the smooth and timely establishment of the online system. In addition, an inconsistent power supply presented the constant threat of data loss and system failure. These issues have been overcome by developing customised software solutions utilising the skills of experienced IT professionals.



### Results

In 2001, Copytime generated additional revenue attributable to e-commerce of \$300,000 from domestic sales and \$1,000 through international sales. This was mainly due to job requests

Colin Rhode

Advanced e-Business



**NOIE**  
The National Office for the  
INFORMATION ECONOMY

**ERNST & YOUNG**  
FROM THOUGHT TO FINISH.™

submitted online and from customers having found the business through its website. Currently, Copytime receive approximately 10 email jobs per day. Additional revenue from e-commerce has contributed \$76,000 to gross profit.

Cost savings achieved during 2001 totalled \$139,800. Access and retrieval efficiencies afforded by the VPN has produced the most significant cost saving (\$100,000). The use of the Internet to procure supplies and manage banking has improved staff efficiency by \$23,400 and \$10,400 respectively. In addition, the use of email as the main form of correspondence has reduced the need for the postage and couriering of documents (\$4,000).

Ongoing costs associated with the e-commerce implementation totalled \$95,900 in 2001. The majority of this figure was allocated to the recruitment of an IT Manager to oversee the online system (\$40,000). Other ongoing costs involve support of the electronic payment system and include access charges (\$3,500) and bank fees (\$3,700). In addition, capital expenditure was amortised over a four-year period (\$47,500).

Service delivery to customers has improved significantly following the implementation of e-commerce. Email provides a convenient method for file transfer, minimising the need for customers to physically submit requests. In terms of internal processes, easier access to required documents via the VPN (Virtual Private Network) enables more timely response to customer enquiries. Furthermore, staff ability to control printers from remote locations ultimately contributes to a shorter delivery cycle.



## Future

In the past, Copytime has found it difficult to maintain a consistent marketing and maintenance strategy for its website due to the demands of increased printing work. To manage this issue, the company intends to strengthen marketing efforts to raise the company profile and increase revenue.

## Revenue and Costs

### E-commerce Establishment Costs

		(\$)
Web development	50,000	
Preliminary research	20,000	
Staff training	30,000	
Database integration - VPN connecting branches to a central database	30,000	
Telecommunications	4,000	
Disaster recover plan - backup server	20,000	
Back office infrastructure	10,000	
Printing - marketing material	9,000	
Software - database integration and modification	2,000	
Hardware - router/server/hub/cabling	36,000	
Hardware - data storage and backup	1,000	
<b>Total Establishment Costs</b>	<b>212,000</b>	

### Operating Benefit from E-commerce

		2001 (\$)
<b>Additional Revenue from E-commerce</b>		
Domestic	300,000	
International	1,000	
<b>Total Additional Revenue from E-commerce</b>		<b>301,000</b>
<i>Less: Cost of Sales</i>	(225,000)	
<b>Gross Profit from E-commerce</b>		<b>76,000</b>
<i>Add: E-commerce Cost Savings</i>		
Postage / Freight	4,000	
Administration - banking	2,000	
Staff time: procurement	23,400	
Staff time: online payments and banking	10,400	
Staff time: access and retrieval of data	100,000	
<b>Total E-commerce Cost Savings</b>		<b>139,800</b>
<b>Gross Benefit from E-commerce</b>		<b>215,800</b>
<i>Less: Ongoing e-commerce costs</i>		
Amortisation of Capital Expenditure*	(47,500)	
Electronic payment systems - fixed costs	(500)	
Electronic payment systems - variable costs	(3,000)	
Bank charges	(3,700)	
Internet service provider	(1,200)	
Staff Requirement - IT manager	(40,000)	
<b>Total Ongoing E-commerce Costs</b>		<b>(95,900)</b>
<b>Operating Benefit from E-commerce</b>		<b>119,900</b>

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

For further information on this case study please go to [www.noie.gov.au](http://www.noie.gov.au)