

Advancing with e-Business

Allam Homes

www.allam.com.au



Colin Staunton

Advanced e-Business



The Business

Allam Homes is one of Australia's largest residential construction companies specialising in the building and development of home and land packages, contract construction and complete residential developments. A family-owned company based in Penrith, New South Wales, Allam has 105 full time employees and has been operating since 1991.

The Idea

The company first introduced e-commerce eight years ago to decrease its reliance on an increasingly cumbersome paper-based system. The company sought to increase communication efficiencies with remotely located site supervisors, clients and suppliers.



Allam Homes implemented their e-commerce initiative in three stages. The first stage involved the introduction of personal computers for basic automation, database and email facilities. The second stage involved the implementation of processes whereby all documentation was created and managed electronically to ensure seamless access to current and accurate information, minimising order tracking problems and costs related to building errors. The third stage involved equipping site supervisors with Personal Digital Assistants (PDAs) connected via mobile phones to allow real-time communication and document retrieval.

Within the second and third phases of the e-commerce implementation, Allam Homes launched a company website which acted as an advertising and product demonstration tool, and was advertised on local radio and television. In the future, the website will be used as the central communication point for the company, and its clients and suppliers.

M-Commerce

Mobile commerce (m-commerce) involves communication via wireless handheld devices, which negates the need for a land-line connection to transmit data or access the Internet. Due to the dispersed location of work sites, the company has adopted m-commerce technology to allow remote information input and retrieval.



Allam Homes has equipped each site supervisor with a PDA, which transmits data via a mobile telephone. The PDA interfaces with the mobile telephone via Bluetooth technology, a short-range wireless connection standard. The mobile telephone then maintains a continuous connection to the office and Internet using General Packet Radio Services (GPRS), a wireless communication protocol.

Previously customer order tracking errors had incurred major costs to the company due to outdated or inappropriate specifications being used for construction. The use of mobile technology has allowed site supervisors to view blueprints easily and become instantly aware of late changes to site plans.



The Investment

The initial establishment costs of the system totalled \$99,780. The majority was for website development (\$25,000) and the installation of network cabling (\$30,000). Hardware and software expenditure relating to document scanning and printing amounted to \$14,900, whilst four servers and related hardware incurred \$12,000 and \$5,500 respectively. The four PDAs cost \$1,600 each.



Hurdles

Most of the site supervisors had no previous experience with computers and there was some resistance to the new technology. The purchase of user-friendly software with a simple push-button interface, eliminated the need for extensive training and encouraged staff to adopt the technology. The security of the devices and the information they stored was initially an issue. To address this the amount and type of information stored on the PDAs was limited.



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Results

Within three months of developing the website, the company received over 300 online enquiries, three of which were realised as house sales totalling \$600,000. As a result, online sales contributed \$150,000 to gross profit in 2001.

Use of PDA's on-site has decreased the incidences of delayed or erroneous communications between customers, site supervisors and contractors. This in turn has reduced the occurrence of building errors, saving Allam Homes approximately \$450,000. A further \$15,000 in travel costs and \$80,000 in staff costs were saved by utilising e-commerce and m-commerce.

Ongoing costs totalled \$79,145 in 2001. Costs associated with maintenance of the website and online systems include website hosting (\$6,000), Internet Service Provider (ISP) fees (\$1,740) and Integrated Services Digital Network (ISDN) connection costs (\$2,700). Annual licensing fees for the anti-virus software incurred \$4,000, with additional Information Technology (IT) staff and training costing a further \$3,000 and \$1,000 respectively. A further \$23,345 has been allocated for the amortisation of capital expenditure over a four-year period.

Future

The second stage of the e-commerce strategy involves further developing the website to increase interactivity. Suppliers will be able to receive specific instructions for each of their current projects and clients can reserve land, request houses, pay deposits online, and request changes to their properties. The website will also include virtual tours of its designs in addition to floor plans currently available.

Revenue and Costs

E-commerce Establishment Costs

| | | |
|--|--------|---------------|
| Web development | 25,000 | |
| Domain name registration | 180 | |
| Staff training | 1,000 | |
| Telecommunications - cabling | 30,000 | |
| Security - disaster recovery plan | 4,800 | |
| Security - hardware, software and backup tapes | 3,500 | |
| Hardware - servers (four units) | 12,000 | |
| Hardware - PDAs (four units) | 6,400 | |
| Hardware - routers | 2,000 | |
| Hardware - printer and scanners (20 units) | 7,900 | |
| Software - scanning (20 units) | 7,000 | |
| Total Establishment Costs | | 99,780 |

Operating Benefit from E-commerce

| | | |
|--|-----------|-----------------|
| | | 2001 |
| | | (\$) |
| Revenue from E-commerce | | 600,000 |
| <i>Less: Direct Costs</i> | (450,000) | |
| Gross Profit from E-commerce | | 150,000 |
| <i>Add: E-commerce Cost Savings</i> | | |
| Postage | 2,000 | |
| Photocopying | 8,000 | |
| Printing | 6,500 | |
| Reduction in building errors due to order tracking | 450,000 | |
| Banking administration costs | 12,000 | |
| After sales service | 5,000 | |
| Bank charges | 3,500 | |
| Communication time saved through email | 100,000 | |
| Travel - less staff required onsite | 15,000 | |
| Labour | 80,000 | |
| Telecommunications | 55,000 | |
| Payroll | 240 | |
| Total E-commerce Cost Savings | | 737,240 |
| Gross Benefit from E-commerce | | 887,240 |
| <i>Less: Ongoing E-commerce Costs</i> | | |
| Amortisation of capital expenditure* | (23,345) | |
| ASP hosting | (3,000) | |
| Internet Service Providers | (1,740) | |
| Bank charges | (1,000) | |
| Electronic payment systems | (360) | |
| Website hosting | (3,000) | |
| Licence fees | (4,000) | |
| Telephony - ISDN | (2,700) | |
| Training | (1,000) | |
| Staff - additional IT support | (3,000) | |
| Systems maintenance | (36,000) | |
| Total Ongoing E-commerce Costs | | (79,145) |
| Operating Benefit from E-commerce | | 808,095 |

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

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