

Take a tablet for construction success

Hunter region residential construction firm uses tablet PCs to mobilise its supervisors



The tablet PCs are more suitable than laptops for carrying and using in an upright position

Solution Summary :

Name	: McDonald Jones Homes
Industry	: Residential building and construction
Size	: Approximately 36 staff
Problem	: Supervisors and after-sales service staff on and off site needed to stay connected with back office and communicate job information to building labourers and other project workers in real time.
Solution	: Eight Fujitsu tablet PCs loaded with Companion Systems' OnSite Companion construction industry software.
Cost	: \$300,000 for the tablets alone plus the software on top of it. AirCards at another \$60 or \$70 a month each.
Rollout duration	: Tablets were phased in over a year

Results : Tablet PCs have made McDonald Jones construction sites more efficient, helping them cope with increased sales demand.

In tough times for the construction industry in regional NSW, Hunter Valley-based McDonald Jones Homes has found ways to boost its bottom line thanks to mobile technology.

Michael Schofield, pre-construction manager and IT manager at McDonald Jones Homes, says the residential construction company has continued to grow strongly as a result of advertising and greater efficiencies that hinge on adoption of tablet PCs using building industry software from Australia developer Companion Systems.

"Certainly the sales are higher than last year. But I don't believe that's a reflection of the market in this area generally. I think it's more a reflection of us," Schofield says.

Unable to pinpoint which of its rival have been successful and which have not, he says in general residential building players outside Sydney are struggling. Yet McDonald Jones Homes is in growth mode – so it is surely doing something right.

Schofield personally believes advertising has played a big role. "The business is definitely growing strongly," he says. "This is my view – not a company view – that the actual advertising itself has certainly assisted our growth."

The company's adoption of eight tablet PCs from mid-2005 has made the construction sites more efficient so McDonald Jones Homes can cope with increased sales demands, Schofield says.

Equipping construction site supervisors with tablet PCs and the right software has been an expensive exercise, but worth it.

"It has definitely changed the way supervisors work on site. And they had minimal computer experience. They are all powering on," Schofield says.

Before deploying tablet PCs, McDonald Jones Homes' supervisors were using paper. They had vast collections of paper-based diary notes and job folders for the company's various projects; all of which took time to write, store and retrieve, let alone keep all team members updated with the right information and data sets.



"We've got better control of things. We don't need to go trawling through the back of a ute to find a folder," Schofield says.

Previously, supervisors needed to actually travel around to get hold of the job folder or other paperwork needed. With tablet PCs hooked up to the Internet, it can all be done by email.

We are also getting clients to digitally sign paperwork on the tablet. Then it can be emailed back to the office," he says. The tablet PCs use Sierra Wireless AirCard run on CDMA+ or EV-DO.

They can automatically connect to that but only a few areas of Newcastle that have that. And at the end of the year ... we are very hopeful that the Hunter Valley will have 3G and we'll be able to get switched over to that," he says.

Schofield says CDMA offers quite good coverage but does drop out as supervisors drive around, using the tablet PCs' external antennae. Only a few jobs have had difficulty getting coverage.

"You can sit there and get the details of another job picked up and email a tradesperson from wherever you are," Schofield says. "The tradesperson doesn't need to go back to the office [either]. It saves time."

Tablet PCs, like any computer hardware, aren't much use to anyone without the requisite software. In McDonald Jones Homes' case, this means spreadsheet

software Microsoft Excel, an accountancy application, a browser and Outlook client to send and receive email, and Companion Systems' construction industry monitoring and management solution.

"Companion Systems is used for the monitoring of the actual job," Schofield says.

Matthew Camenzuli, director at construction management software solutions specialist Companion Systems, says McDonald Jones Homes' application is called OnSite Companion and works with any brand of tablet PC.

"The system handles all the jobs they have in their workflow," he says. "It works within the office as well, because the internal drives the external activities in the building industry."

Hooked up to broadband Internet, customer and project information can be easily and quickly synchronised with that held elsewhere. OnSite Companion can be used through a VPN remotely or back in the office, or you can give users a wired link back to the office as well. The aim is to help site supervisors stay out on site and get more done. "Site guys ... are mostly carpenters with no knowledge of technology. If you show them value and benefits to making their lives easier, they'll use it," Camenzuli says.

Mobility in construction is about mobility from site to site but also within a site. Slate-type tablet PCs are quite robust enough for the purpose. "They don't actually need to be military grade. You're not in the mud or heavy dust usually. We also put the tablet PC in a box, which is dust-protective and shock-resistant," Camenzuli says.

Schofield adds: "They're less likely to be damaged [than laptops]. We don't have to open up cover and stuff."

McDonald Jones Homes does have one laptop but it tends to stay in the office. Although the cost of deploying tablet PCs has been high, the implementation has been problem-free and the company plans to expand the use of tablet PCs. "We're already expanding it to after-sales staff. The software is being redone [to suit]. We expect that to happen in the next month or two," Schofield says.



The tablet PCs are more suitable than laptops for carrying and using in an upright position

About Fujitsu

Fujitsu PC Asia Pacific Pte Ltd is the Asia Pacific Regional Headquarters for PC business of Fujitsu Limited, Japan. It's responsibilities include the marketing and sales of a wide range of personal computers for the corporate and end-user markets in the Asia Pacific.

Fujitsu PC Asia Pacific pledges "Built-in Confidence" for every product under its brand name to reassure users of product and service excellence. From high performance components to stringent quality control and professional after-sales service, Fujitsu stands for reliability and satisfaction.