SGI

INNOVATION FOR RESULTS

Courtesy of Miller Brothers Retail Ltd

Profiting from the Changing Face of Retail

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Miller Brothers Retail Ltd, based in Doncaster, UK, is a specialist electrical retailer selling more than 15,000 products and accessories including TVs and DVDs, domestic appliances, hi-fi and audio, satellite navigation, cameras and camcorders, computing and gaming, and health and beauty products.

The company was founded in 1923, and for over 80 years traded successfully via a traditional retail network that at one point numbered more than 40 stores. However, following a management buyout by the company's directors in June 2006, Miller Brothers decided on a totally new strategy based on a single retail outlet, with the bulk of its business being generated via the internet. The whole of Miller Brothers' operations are now based in Doncaster, including its head office, retail store and warehousing facility, from which all products are distributed throughout the UK.

Winning Business Through 'White Label' Websites

In addition to selling electrical products directly via its own websites, Miller Brothers also operates 'white label' sites on behalf of a number of very large business partners. Each site is dedicated solely to electrical goods, but fits seamlessly with the rest of the partner's website. These include Wal-Mart subsidiary Asda – one of the UK's largest supermarket chains – together with several other major retailers and leading high street brands.

"From an individual business partner's perspective, if a partner wants to feature electrical goods then they'll generally want to offer our complete product range, although we can provide a

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subset of product categories if required. Also, the target audience to which our partners offer those products can vary considerably from one to the next," explains Bill Laughlin, IT Director for Miller Brothers.

"For example, for one partner we might provide a high volume retail environment through which they can offer electrical products to their customers; while for another we might provide a facility that allows the organisation to offer electrical goods internally to its employees, for which the volume of traffic will therefore be significantly lower.

"Whatever the particular partner's business, however, we're looking to provide a full package of services to support the operation of their site. In addition to white label branding, this will typically include Service Level Agreements in relation to uptime; standards related to the presentation and look and feel of the content; and Business Intelligence reporting and analysis back to the partner – covering such key metrics as the numbers of visitors to the site, which pages are converting or not converting, average order values etc.

"To provide this level of service we essentially need to collect and store as much information as we can from our web servers – to help us understand what the customers' journeys are, and give the maximum benefit to our partners in terms of how their websites are operating and exactly what they're delivering."

Scalability Supports Rapid Business Growth

Initially, Miller Brothers hosted its own and its partners' white label websites via a network of commodity PCs, with PostgreSQL acting as the back-end database server. However, to support its growth and expansion, the company wanted a more powerful, competitively priced system capable of supporting much heavier traffic levels, and with the scalability to enable the system to be quickly and easily expanded as its business grows.

"Our business model is such that we have our own websites and those of our partners which we're continuing to develop, but we're also bringing in new business partners all of the time," continues Bill Laughlin. "In terms of our requirements for the growth of the system, it's therefore very difficult to say at any time what these will be, because the volumes and numbers of visitors only truly become evident at the point at which a new partner comes on board. So we really needed a system that gave us the flexibility to scale very quickly with reference to those new numbers."

To fulfil its requirements, Miller Brothers initially approached one of its existing suppliers (a commodity server manufacturer) with a system specification that included the ability to handle a minimum of 20 pages per second for database access. As it lacked in-house expertise in PC clustering, the company was looking for a single system to which the PostgreSQL database could be transferred with the minimum of effort, and that would

In March 2007, Miller Brothers ordered an SGI Altix 450 mid-range server with four dual-core 1.6GHz/8MB Intel® Itanium® 2 processors (eight cores in total), 24GB memory, two 146GB 15,000 RPM SAS disks and SUSE® Linux Enterprise Server 10. To meet the company's very tight timescales, the system was configured and shipped within 24 hours, and fully operational the very next day.

"The architecture of the Altix 450 is very similar to what we had before, which, with SGI's assistance, made it very easy to get the system up-and-running quickly," continues Brian Jones. "SGI's pre-sales support was excellent, and that's really continued since the system has been installed. When we've had any minor problems, SGI have done everything they can to sort them out for us as quickly as possible, meaning we've been able to provide a solid, reliable service for ourselves and for our partners.

fit seamlessly within its existing infrastructure. To meet its rapidly expanding business requirements, Miller Brothers also needed the system to be installed within the shortest possible timescale.

"We first got in touch with SGI when we were let down by our existing supplier, and were immediately impressed by their enthusiasm to help us," says Brian Jones, IT Manager at Miller Brothers. "They really bent over backwards for us. They wanted to get involved, and 'went the extra mile' to make sure our timescales and expectations were met – which we really didn't find from anyone else we spoke to.

"Our PostgreSQL database server drives all of the web servers we're using to serve content for our partners, and so we chose SGI® Altix® predominantly because it was quicker than the commodity server we were originally considering, and could easily provide the level of database performance we needed. It was also very expandable, meaning we could add more CPUs and memory as our business develops – and much more easily than we could with alternatives such as PC blades."

"The system has been handling around 250,000 visitors per month, but we expect that to increase considerably as we get into the much busier trading period in the run-up to Christmas. And we certainly see the Altix as giving us the confidence that we can handle a major increase in load etc, as and when we need to."

Expanding Service Offerings for Partners

"An unexpected benefit of the SGI Altix is that the additional power, resource and scalability provided by it is enabling us to bring in more partners, more quickly than we'd initially planned," concludes Bill Laughlin. "Because we have that extra processing power and scalability, when we're speaking to potential partners we can make reference to our current partners and the level of service we're able to offer in terms of the responsiveness and reliability of their sites, and we're gaining new business as a result of that.

"Looking to the future, we see our current partners as very much the starting point for extending our services – not only to other high street brands, banks etc, but also to large organisations with thousands of staff, who as one of their staff benefits will be able to gain access to electrical products at highly competitive prices. We're one of the few organisations that are offering these types of services to such a broad range of business partners; we're developing new applications in areas such as internet kiosks for shopping centres, airports etc, that we'll soon be adding to our portfolio; and we're also augmenting our existing PostgreSQL database server with further integration to the Oracle database management system as our business is expanding.

"The increasing uptake of internet purchasing really is creating a major shift in the retail market, and we expect a number of leading retail organisations to be interested in benefiting from the types of white label services that we're able to provide. We're going to continue to innovate, and we believe that while the majority of ASPs and ISPs tend to focus on price rather than performance, the reliability, ease of use and serviceability we're receiving from SGI will give us a significant competitive advantage. So the infrastructure we're operating now is going to serve us very well in the future – and across our new sales areas as we continue to develop them. "