

Matthew Fuller, Technical Services Director, ABM Critical Solutions, tells us why Data Centre Infrastructure Management (DCIM) is paramount for e-tail businesses to withstand increasing consumer demand.

Gone are the days when the only way to shop was on a high street. Increased connectivity, coupled with the Internet of Things, is changing the retail landscape. The simplicity of online shopping contributed to the £16.2 billion we were predicted to spend online last year on clothing and fashion¹ and it doesn't look to be slowing down.

So big is the trend that over the next five years, the online fashion market alone, is forecast to increase a further 79% by 2022, reaching just under £29 billion².

The question for all retailers, not just the clothing and fashion sector, is how do you ensure your Data Centre Infrastructure Management (DCIM) can withstand the demand of online? It might feel like an obvious question, but you'd be surprised how many well-known retailers fail to get this right.

The DCIM of a business represents the collection of tools that help it to organise and manage its data storage, within a centre. This includes everything from drives and cables to computers. The nuts and bolts of the back end.

An efficient DCIM system will assist a business to meet the growing global demand for storing information electronically. That may be devising more efficient ways to store and access electronic data or implementing processes that prevent overheating which cause failures.

Despite being multi-million-pound businesses, many top brands fail to implement a robust DCIM and therefore fail to safeguard their entire operation.

In a project recently, a £10m online retail business had not invested in its own DCIM in over 20 years, leaving it in such a fragile condition that it could have fallen over at any time.

¹ <http://www.mintel.com/press-centre/fashion/uk-online-sales-of-clothing-fashion-accessories-and-footwear-grow-by-17-in-2017>

² <http://www.mintel.com/press-centre/fashion/uk-online-sales-of-clothing-fashion-accessories-and-footwear-grow-by-17-in-2017>

Costs and the complexity of developing and maintaining the infrastructure are usually the barriers to investment. It's ironic that cost could prevent investment in this area of the business, yet failure to do so could be the one thing that closes the entire operation down.

Most retail data centres are built on a 10-year cycle, but, the average retailer probably invests in its DCIM every 15 years. Without investing, it means that any business, regardless of its size, is at risk.

For the project we completed recently, the repercussions of the DCIM failing would have been huge. Having no recovery system in place, for example, means an organisation is worryingly exposed. A single point of failure without any built-in redundancy could have wiped out the business.

A business that has its house, or in this case its DCIM, in order is going to be much less exposed to risk, which can only be a good thing as we move closer to world that goes beyond cloud storage.

Another factor for businesses to consider when thinking about investing in its DCIM is the use of enhanced environmental technology. Data centres are the largest consumer of power but if the DCIM is carefully and appropriately managed, the energy required to organise and store large amounts of data can be used with greater efficiency.

In the recent project that we undertook, we modelled several energy solutions, using the latest CFD (computational fluid dynamic) software, before introducing them to our client's DCIM. This ensured they met with design, resilience and total cost of ownership. We also swapped florescent lighting for LED lighting to reduce the risk of failure and to consume less electricity, and reduce costs.

We introduced the latest energy efficient UPS (Uninterrupted Power Supplies) distribution and cooling products to ensure productivity uptime and environmental reductions were met, and changes were made to the flooring to reduce potential airborne contamination.

The importance of DCIM should never be underestimated, particularly in the e-tail marketplace. This type of business holds vast amounts of personal data including addresses and banking details, which effectively keeps it trading. While it is seen as a retailing business, it is also a big data centre, yet, so may e-tail businesses have data centre management at the bottom of its priority list.

The question shouldn't be a case of 'if', but more a case of 'when', should a business invest in its infrastructure to safeguard its future.

The possible outcomes for a business operating online, without an efficient and stable DCIM in place, doesn't bear thinking about.