Asos invests to deliver future growth

Asos is investing in IT. Chief information officer Pete Marsden explains how he plans to make sure technology underpins the etailer's phenomenal growth. By Rebecca Thomson

sos' first-half results did not, at first glance, look as glittering as its financial updates normally do.

Pre-tax profits fell 22% to £20.1m in the six months to February 28, despite sales surging 34% to £481.7m. But the reason for the fall is a renewed vigour in IT and infrastructure investment – a total of £68m is being invested during the current year in logistics, IT and the fashion etailer's Chinese site.

Chief information officer Pete Marsden is heading Asos' drive to bring its technology bang up-to-date. From the outside, it is easy to assume that the etailer's technology has always been cuttingedge – its phenomenal growth has, after all, relied on the technology driving its site. But it is that fast growth, combined with the relentless pace of change in retail and the speed at which the fashion giant is scaling up in size, that means Asos' systems need attention.

Marsden, who joined the business in September 2012 from the Royal Bank of Scotland, says: "We had to change quite a lot. The main problem with Asos' technology was that a lot of it was self-built in the early days.

"When they built these systems they didn't expect Asos would be a global player that needs to operate with Far Eastern languages and at the scale we now operate. They didn't have the level of sophistication needed and we have had to rebuild a lot of the frontend systems."

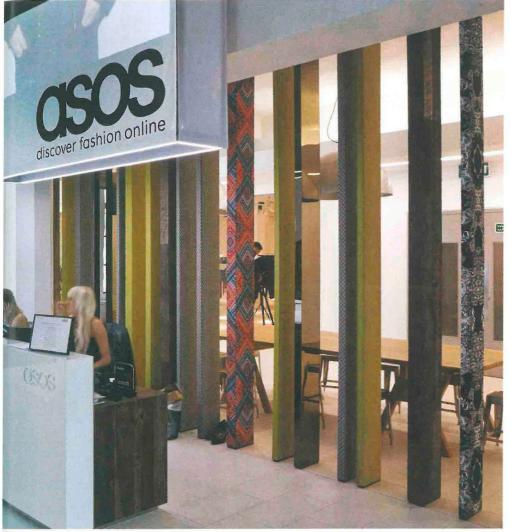
Asos' investment schedule is formidable. It has already refreshed its frontend systems, rolling out a new content management system that allows the marketing and editorial teams to update pages and content daily. The system also allows different content to be uploaded for different markets.

Marsden says that Asos is now working on the security and checkout aspects of its website. "We're rebuilding core parts of the platform such as the checkout and the basket, to make sure we can keep up with growth. That part of the system has to be really high-performance. Customers want to press a button that says 'buy' – at that point, we have to check the stock,

Pete Marsden (pictured right) has overseen radical overhauls of Asos' IT infrastructure

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THE ROLE OF CIOS

It's a common complaint among chief information officers that retail bosses are not clued-up enough on technology, but Marsden says it is not their job to be.

"A lot of chief executives don't understand technology, but it's a big part of our job as chief information officers to explain what's happening in a language the chief executive can understand," he says.

He observes that technology is central to every retail business: "You'd be hard-pressed to find anywhere technology isn't critical – you need great chief information officers that can talk business language."

Marsden believes it is crucial for chief information officers to have strong technical understanding.

"I'm a great believer in having really good technical chief information officers. I've seen too many that haven't got a strong tech background and it's usually where the technology team haven't been able to communicate in the right language," he says.

He believes that speed of change must be a priority: "A fundamental part of the role is having someone that really understands the technologies, is able to get the best out of them and knows how to set a strategy that designs for speed of change."





check the delivery option and make sure the delivery partner can do it, take the payment and validate it all in one second. You have to build that part of the system really well," he says

The etailer will soon allow shoppers to purchase without registering on the site and let them sign in using Twitter or Facebook. "We are looking at all aspects of traffic – how user journeys are managed and how easy it is for customers to navigate," Marsden says.

Back-end building

Lots of work is going on with back-end systems as well. For a start, Asos is building a new data warehouse to help it deal with the volumes of data it gets. "We get petabytes of data. We use Hadoop database technology and we send reports to the marketing team – we give them all the data they could want. We've got data scientists who analyse it all, and we use that

ANALYSIS ASOS



 to shift the look and feel of the website," says Marsden.

As at Amazon, where use of data is credited for a large part of its success, Asos prioritises its use of data. Marsden – who used to work at Orange UK – says: "The level of detail we go into in understanding data is just as high as it was in telecoms. We have a detailed understanding of each customer and the profitability of each customer. We learn what sells well in what place – it's really important for us to understand what's trending and getting the right products to market."

In-built flexibility

Marsden says his key priority is to build speed and flexibility into Asos' systems so they can cope and evolve as the business continues to grow and change. "Fashion moves at such a great rate, it's a real challenge. It's really important for us to try and design for speed," he says. "Speed doesn't happen on its own – we have to constantly think about how we are building systems so they're easy to change. That takes a lot of effort. We build in a modular fashion."

That means Asos is boosting its use of cloud technologies, especially when it comes to international operations.

"We are very conscious that a UK data centre is a very long way from Australia. The cloud improves speed and helps with flexibility – we don't have to keep buying new equipment."

Asos has historically built a lot of its own systems, and depending on the area of the business, that is still the case. "The closer to our customers the system is, the more likely we are to build our own systems," says Marsden. "Apps and mobile sites, for instance, we built ourselves – warehouse management systems, we are not specialised in."

A lot of the work going on at the etailer is internationally focused. Asos is launching apps for Australia and the US, and will do the same for France and Germany later in the year. Marsden says getting everything right for different types of consumers is a delicate balancing act – the content, the language, payment options and delivery options all change in each market.

He says: "The look and feel might be similar but in Russia, for instance, they want to have cash on delivery because it takes so long to get to them – the last thing they want to do is pay on credit card before the goods arrive."

In the Far East and China, meanwhile, the look and feel of the site and apps is very different. "They want five times as







TECHNOLOGY PROJECTS ASOS IS WORKING ON

- Asos has worked hard on improving its front-end systems, rolling out a new content management system that allows editorial and marketing teams to update content every day. This includes product pages and editorial content, and content can be changed according to the country it is being published in. The system underpins Asos' new Daily Destination page, which curates style, celebrity content and news. It is also updated daily.
- The etailer is addressing the security aspects of its site, including a reworking of the checkout and payment processes.
- Asos is building a new data warehouse to help its understanding of data.
 The etailer relies heavily on data to help it make decisions on everything from getting the right products to market to the look and feel of the site.
- One of chief information

- officer Pete Marsden's key priorities is to increase the speed and flexibility of the systems so they can keep up with the pace of change in the business. That has led to growing use of cloud technologies to help it scale up operations easily, especially internationally.
- Asos is launching dedicated US and Australian apps, and will launch apps for France and Germany later this year.
- The etailer is constantly working to improve delivery options at home and internationally. It plans to launch a 'pick-up, drop-off' service in France and England, which will allow shoppers to collect orders and return unwanted goods.
- It is piloting a loyalty scheme with a small group of UK customers. The scheme will reward shoppers with five points for every £1 spent, and Marsden says the business will watch how customers react to it closely.

Asos' approach combines slick front-end content with strong back-end support

many images, they want more detail, the level of information they ask for is much higher. They're also even keener on social media than we are. They look for recommendations from other customers and peer reviews," he says.

While all this is going on, Asos continues to push the envelope on home turf, coming up with innovations in areas from delivery to content. It plans to roll out a 'pick-up, drop-off' service in France and England that allows shoppers to collect parcels from a network of independent retailers, and is piloting a loyalty scheme in the UK.

While Marsden insists "it's not rocket science", coming up with a technology strategy that supports a growth plan like Asos' is a big task. His team is around 400 strong, and split into three.

One section works closely with marketing, another focuses on core ecommerce systems such as the warehouse and buying and merchandising, and the third section is the data team.

Marsden says: "We all work very closely together and are very focused on the timely nature of the business and understand what's selling every day, and understand the performance of the site."

By all appearances, Asos's technology team is working at pace to reflect the changing etail environment.

34 Retail Week April 11, 2014 www.retail-week.com