



## **Ebusiness technologies: foundations and practice**

*Tesco*

### **Narrator**

Tesco is a good example of how the management of a supply chain is vital to many businesses. The retail supply chain deals with a huge range of goods. They come from many suppliers around the world and they need very different handling. The over-riding consideration getting high quality products in the right place at the right time is especially challenging with fresh produce. For example: Tesco could order ten thousand cases of lettuce on a Monday for delivery on Wednesday. But if the trade pattern changes in the meantime they may be sending those lettuce to the wrong stores. So Tesco has systems to reapportion those lettuce based on the latest sales information from their stores.

This is the distribution centre serving the south of England. You are looking at just half of its total length. For operational reasons the goods here are laid out in a similar way to the standard supermarket layout. That means that when they are assembled into loads they can come off the trolleys in the correct order for the store. But if it's laid out like a store it doesn't look like one. It's five storeys high, around a thousand metres long and much of the work is done with forklift trucks.

### **Steve McCue**

We currently employ one thousand people on the site, across three shifts. We are operational twenty-four hours a day, seven days a week. At the moment we are currently distributing about one million cases per week through the DC. We have about one hundred drivers on the site.

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Lorries arrive at the distribution centre from suppliers to match a tightly scheduled timetable. The appointment slot is just fifteen minutes. Some goods come by supplier's own transport. Some by third party logistics companies. Some by Tesco's own lorries that would otherwise be returning empty to base. Satellite navigation systems warn the distribution centre control room when an in-bound consignment is ten minutes away.

### **Steve McCue**

The movement on site is approximately one hundred and thirty vehicles for the goods inside and there's about a hundred and thirty out- out-going trailer movements from the goods outside which are then delivered to store. We currently service the south east of England as far down to the south coast – Hastings, Brighton, West London, Covent Garden and the East Anglia region up as far as Norwich.

### **Narrator**

As soon as the in-bound lorry has docked at one of the twenty-eight arrival bays the consignment is off-loaded.

Pretty well everything is controlled by computer.

Scanning the delivery updates the system about how much has arrived. That generates the instructions for the operators to park the consignment until it's needed.

During it's relatively brief stay in the distribution centre the pallet will work its way down to the lowest level, where it's ready for the pickers.

**Steve McCue**

The next stage of the operation is picking. That is our biggest function here – picking. We approximately assemble for about three hundred stores and that's covering our own stores, plus we trunk to other depots across the south east of England.

**Narrator**

Stunned perhaps by the sight of a five storey supermarket in which everything comes in pallet sized loads it's a bit of a surprise that the pickers work with very much smaller units.

**Graham Booth**

And if you have a look at the portfolio of stores that we have, including home shopping, you've got everything from hyper-markets of, you know, twelve thousand square metres down to Express Stores some of which are less than a thousand square metres. We've had to adapt our supply chain to handle – and our distribution techniques – to handle that really diverse areas of activity.

**Steve McCue**

Assembly will then pick the cases into a cage and the cage is then loaded on to a 'goods out' loading bay, straight on to the vehicles.

These are then available for Transport and then issue the drivers with trailers and that's the last movement on site, the trailer leaving the site and then he will make his way to the store.

**Graham Booth**

Ninety eight per cent of everything we sell in our stores comes through our own distribution centre. Only two per cent goes directly from vendor to our stores which means, and the reason we have done that, is that we are in control of our destiny and we like that. We like the feeling that we can control it.

**Christine Cross**

One of the interesting things, if you look at products, is to look at the number of times that they are actually physically handled between point of manufacture and point of sale and very often there are a number of layers in that, whether it's either an importer, a shipper, a consolidator, various stages of warehousing from wharf to store, then distribution centres, at the back of store and then handling to get it on to store. And one of the things that colleagues in value chain have been working very hard on is looking at that process on everything from a can of carbonated drink right the way through to soft lines to say how can we actually minimise the number of touches on a product because ultimately that's going to not only drive up costs, but reduce lead time as well and the two are inter-related. The faster you can get the product there the more cheaply you get the product there.

**Narrator**

But why have such systems at all? What are they achieving?

**Graham Booth**

We work on a principle called 'lean thinking', and you have probably heard of this in the automotive industry

and it's a very popular theory and we use that as a principle. And the theory there is that you've to take out non-value added activity because every time you add a process into movement of product, whether it's right the way back from the grower right to the customer taking it off, it's adding cost into your supply chain and probably being detrimental to having the product on sale.

So we work to that principle and over the years we have tried desperately to take out the non-value added activity in the business and that includes information flow. And when we looked at our information flow as an example we found that we had information sitting on systems sometimes for twenty-four hours and not moving.

So we then said 'hey, why is it sitting there and if we were able to release that information earlier, wouldn't that improve the process in terms of speed of lead-time and quality of product to the customer?' I have put that very simply. So that's the exercise we went through and in some cases we were able to reduce lead time of product from forty eight hours down to a twelve hour lead time to our stores ordering and receiving.

For ninety five per cent of the product that we sell the relationship with our suppliers has become paramount. Now all that has changed. You know, go back ten years since we started and it was confrontational. It was all to do with margins, it was all to do with price. Today margin is very important, price very important, but what about the supply chain? What about our product moves from A to B? What about its quality? Where does it come from? What's the grower like? - and so on and so forth.