

# WHITE PAPER

## SUPPLY CHAIN SKILLS

### The big logistics skills challenge

**If the UK is to prosper in a post-Brexit economy, then important actions need to be taken to strengthen the skills and labour pool available to the logistics and supply chain sector.**

**By Andy Kaye, CEO, Bis Henderson Group and Chairman of the Novus Trust.**

It is widely broadcast that logistics and supply chain operators face a growing shortage of skills and labour. An ageing population means that the average HGV driver is in his or her Fifties and young people are disinclined to enter an industry which, wrongly, is perceived to be low skilled, poorly paid, with unsocial hours and lacking in opportunity.

In the UK the shortfall has to some extent been taken up by migrants – there are anywhere between 45,000 and 60,000 Eastern European drivers over here – but with uncertainty over the availability of labour from Europe following Brexit, there are serious questions over how much longer this resource will be available.

The problem is by no means confined to the UK – many other developed countries face the same demographic time bomb and even in less developed ‘source’ countries in the Far East businesses face challenges in manning supply chains effectively. Worldwide the current decade is expected to have seen a 26% growth in logistics and supply chain employment.

But to focus on shortages of manual, semi-skilled labour in ports, warehouses and behind the wheel is to miss the bigger picture. A much more serious challenge is the lack of high-level technical and managerial skills.

Over the last fifteen years supply chain management and logistics has been transformed, structurally, by changes in the way we all shop and live. Technology, principally in the form of the internet and the proliferation of mobile phones, has radically altered the means by which goods and services are conveyed to consumers – and these changes are far reaching.

Take ‘big data’ and digitalisation. Organisations, especially retailers, have more information on their customers than ever before. They can, if so minded, monitor the customer’s spending patterns, car use, holiday choices, family activities, insurance – whatever is important in their lives. They can factor in seasonality, weather, sporting fixtures and other influences, and can use this information in powerful ways.

Not only can 'predictive analytics' improve forecasting by seeing peaks and troughs coming, potentially at the level of the individual SKU in a particular store, but demand can be managed in ways ranging from individualised promotions to the pre-ordering and positioning of goods. With the 'Internet of Things' – refrigerators that raise their own replenishment orders, for example – this becomes even bigger.

But to do anything sensible with this data, supply chains require mathematical and analytical skills – lots of them. Computers may crunch the numbers, but high level human skills are needed to determine what is important, what weights to put on different factors, and to model the likely effects of different strategies, both on customer behaviour and on profitability.

Devising the appropriate strategies requires a rather different set of supply chain skills.

Traditionally seen as an unfortunate but inescapable cost base, the supply chain is now a real source of competitive advantage. For retailers of branded products, the selling price they can offer is likely to be fairly standard. The choice to purchase is becoming much more about the delivery proposition – in-store, home delivery, pick-up locker, same day, next day, unpacking, installing, removing old equipment, and so on. Designing systems and strategies that will deliver the chosen proposition reliably takes rare skills – designing systems that can deliver a profit, even more so.

However, these are just skill sets built around known and established logistics and supply chain issues. The industry needs blue-sky thinking as well. There are good reasons why firms like Amazon and Google spend fortunes dreaming up seemingly outlandish logistics 'solutions' – from drones, autonomous vehicles and delivery 'tubes' to the reintroduction of the push-bike – that will never catch on. Or will they? Similarly, what effects will 3D printing and similar technologies have on supply chains? Already it is technically possible to buy a download of a computer file that you can feed into a 3D printer at home or at a street corner boutique and have a pair of trainers constructed.

Increasing automation of materials handling processes and control operations may, to some extent, offset skills shortages at the operator level. But this, in turn, raises the requirement for further skills in the planning, implementation and operation of IT systems, and the ability to implement successful business strategies in line with company goals.

The challenges are not simply technical – they are also managerial. As consumers become ever more demanding on price and service, organisations have to work globally to source in the cheapest and most time-effective way. Brands like Zara have moved fashion from four seasons a year to a season every two weeks, and this is achieved by co-ordinating designers, suppliers and shippers in any corner of the world – redefining the benefits of speed-to-market, agility and cost.

Ever fewer products are true commodities with relatively consistent and forecastable rates of sale. For the rest, manufacturing and logistics have to be infinitely flexible, and complex choices have to be made. Where is the true balance between cheap manufacture in the Far East - with high air-freight costs - and using a supplier that is more expensive but closer to market?

Often this involves 'soft' contracting – the supplier may have some idea of overall volumes, but the exact product breakdown on sizes and colour may not be determined until incredibly late in the cycle. This is not simply a technical challenge, as managing supplier relationships with a business in a far-away country with a different language and culture, is not straightforward.

So supply chains increasingly need a raft of high-level skills – mathematical, technical, managerial and strategic. These are not skills that can be acquired through experience in order-picking or driving a forklift truck, but nor are they skills that are typically taught in conventional degree, or even Masters, courses.

Unsurprisingly, it is estimated that there are six supply chain jobs available for every suitably qualified individual. The gap cannot be bridged merely by competing in the small pool of candidates with, at best, partially relevant skills and qualifications. We probably need to be looking at psychometrics to match personal traits with appropriate career paths – but whatever an individual's skills and personal preferences, there will be something rewarding for both employer and employee within the supply chain.

As an industry we need to put a new proposition to the potential workforce – not just to teenage entrants but also to older workers in other fields with the necessary attributes, and by developing suitable candidates in our existing workforce. We need to inspire people with the career development potential of the supply chain.

We have a good story to tell.

At the purely mercenary level, the wide shortage of skills ensures that the right candidates can progress very quickly to more than reasonable salaries and, in a highly competitive marketplace, can 'trade' up. What is more, there are plenty of opportunities for varied experiences and overseas postings.

More generally we can claim that our future supply chain leaders will be shaping the future of a global industry. They will be directing complex time-critical operations and programmes, leading large teams across a wide range of specialisms and geographies, and will be at the forefront of the latest technological and social trends. It has been claimed that supply chain and logistics offers "a greater scope for unlimited career development than any other major employment sector in the UK".

So what can businesses do to help develop the skilled workforce for the supply chain of the future?

There is currently a great opportunity here in the UK in the form of the recently introduced Apprenticeship Levy. This takes a half per cent charge on payrolls over £3 million, which the business can spend, plus a 10% government uplift, on approved 'apprenticeships'.

Clearly, a major employer trying to spend all this on training semi-skilled operatives is likely to unbalance the workforce profile and risk turning the warehouse into a college.

What is not so widely appreciated is the scope of the term 'apprenticeship'. Properly structured – using mentoring, paid work experience, on the job training and academic studies – the Levy account can be spent on anything from an NVQ level 2 up to a Masters Degree, addressing skill shortages at supervisory, management, or even Board level.

Likewise, addressing the high-level vocational needs of the sector is the Novus Trust. Novus is a not-for-profit organisation, sponsored by around 30 major corporations from Argos to Wincanton – including Bis Henderson Group – and operating under the aegis of the Chartered Institute of Logistics & Transport. Currently it is supporting two courses at the University of Huddersfield (around 120 undergraduates across the four year courses), with an intake to Aston University scheduled for September 2017 and talks on going with other Universities.

The aims of the Novus Trust are to build awareness of supply chain career opportunities, to promote the provision of Honours degree courses tailored to industry needs, increase the industry's profile as a real career choice, and to streamline graduate recruitment for Novus Trust member companies.

As distinct from 'traditional' degree courses, and so qualifying for 'apprenticeship degree', all students receive mentoring, paid relevant summer work experience, paid third year industrial placements, and case study and project assignments designed around real world requirements. Importantly, there is a guaranteed graduate job on successful completion – which the first batch of graduates is now enjoying.

There are doubtless other mechanisms by which the industry can create the potential leaders of tomorrow. The crucial point is that we all need to be committing now to ensure that our industry has the skills required to grow, prosper, and serve the public in an increasingly complex and sophisticated world.

**ENDS**