

Smart delivery

– more than the sum of the parts?

Technology developed for unattended home deliveries has revolutionised the business-to-business express parts delivery world. **Peter Rowlands** considers how it has galvanised the market



In a logistics world where everything is increasingly urgent, there's one type of operation that tends to outdo the rest in terms of priority level: parts delivery. If mission-critical systems go down, suppliers will often move heaven and earth to get the right parts to the relevant engineer as soon as humanly possible.

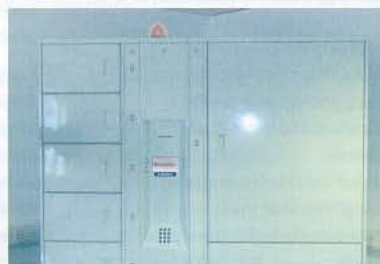
The failed system could be a computer running a massive communications network, or something as mundane as the checkout equipment in a supermarket. If the user thinks it's essential to keep it going, and is willing to pay whatever it takes to ensure this, the supplier can't really argue.

It was partly in response to this requirement that the same-day delivery market was born. When even next-day delivery is not soon enough, same-day may be worth paying for. But increasingly, the urgency has transferred itself even to routine maintenance and repair, and that has given birth to the specialist overnight parts delivery market.

The idea is simple: you deliver parts during the night to the location where the field service engineer will need them the next day. That might be to his or her house, car or van, or to an unstaffed local depot. In most cases the delivery driver needs unattended access to the drop-off point – a car or garage key, for instance – so that the delivery can be made without disturbing the engineer.

Various different kinds of business have moved into this market over the years – notably parcels carriers such as DHL, TNT, UPS and Lynx (the last two of which have merged, of course), and courier companies such as Concorde. You often hear descriptions such as “in-night delivery” and “in-boot delivery” to describe their offerings.

Parts suppliers such as Unipart have also developed expertise in the market, often born



of the exigencies of the motor industry, where a “vehicle off road” (VOR) code has long been synonymous with an urgent call to action.

THE HIGH-TECH DIMENSION

More recently, however, a new element has been introduced into the market, upping the ante even further; and that in a nutshell is the high-tech dimension. First, some of the specialists started using purpose-designed lock-up boxes at public locations for dropping off

This market is not about boxes, it's about the supply chain

Stuart Miller, ByBox

parts for engineers to collect. Often the boxes were positioned on garage forecourts or in similar environments.

Lynx Express, now part of UPS, was one of the earlier specialists to enter this market, and another was the company then known as Hays, whose parts business was later sold to ByBox. Under UPS, Lynx still promotes its Partsflow operation, including its “PUDO” (pick up/drop off) box system, and also has a technical courier service – in which drivers not only deliver the product, but also perform engineering tasks such as basic repairs and swap-outs.

Then something fundamental happened to shake up the market: the internet revolution. With it came a new generation of entrepreneurs, whose initial aim was to harness technology to solve the eternal unattended

home delivery problem. Their efforts gave rise to some of the iconic brand names of the age – the BearBox drop-off system, the ByBox box-bank system, to name but two. The idea was that consumers would either install a drop-box outside their own house, or go to a shared box-bank in their neighbourhood to pick up their deliveries.

Of many early contenders, these two particular companies both survive; but the consumer market turned out to be a tough one to crack, and they have still not come close to hitting the mainstream in it. What happened instead was that these companies discovered their technology could also be applied to the parts delivery market, where the opportunities seemed wide open.

The appeal is easy to understand. Using an unattended delivery system, drivers not only leave parts for engineers at a secure pickup point; the inbuilt intelligence and communications capabilities of the equipment at the site can also alert the engineers to the fact that the parts are there, and can monitor their progress as they're collected and the failed parts are returned. And the same information can be relayed back to base, enhancing real-time visibility massively.

A select group of UK companies have made a speciality of box-bank systems for parts delivery – notably ByBox and Business Direct, a company that emerged from the courier market, and in recent years launched a comparable box-bank system called ParcelXchange. BearBox has also expanded from its stand-alone box systems to introduce arrays of boxes for the parts delivery market.

So is this high-tech approach becoming the norm for parts deliveries? Predictably, the

specialist suppliers say yes. In the words of Stuart Miller, chief executive of ByBox: "A traditional courier can't offer enough these days. Even a plain box system can't offer enough. The market wants visibility, and that means intelligence."

Paul Carvell, recently recruited to the role of chief executive at Business Direct after five years heading Business Post, takes a similar view. "There's massive potential for box systems in this market," he says. "Even hardened logistics companies are recognising the attractions."

OWN DISTRIBUTION

Both ByBox and Business Direct now operate their own distribution networks for getting the parts to the boxes. For Business Direct this is a natural development from its courier history, though for ByBox it has been a greater transformation.

"It is surprising to find ourselves a logistic operator when we started out as a technology company," Stuart Miller acknowledges. "But it was a logical progression for us."

The company was given a major boost when it bought out Hays' parts delivery operation a few years ago, though the transport element was not part of the purchase, and it had to build this up from scratch. But it did acquire Hays' network of thousands of "dumb" drop-boxes (without its trademark inbuilt intelligence), so now it offers both kinds of system according to customer requirements.

There are subtle and not-so-subtle differences between the offerings of these two companies, even though on the surface they may look similar. Business Direct, for



Top, text alerts can form part of the Business Direct service

Above, a ParcelXchange box bank situated in a shopping mall

instance, runs its own transport operation, while ByBox outsources the work to self-employed drivers. To the customer, however, the result may seem much the same.

Both offer more conventional services alongside their high-tech systems. Business Direct, for instance, continues to offer traditional "in-boot" deliveries and deliveries into secure premises. ByBox can offer its Hays-style plain boxes.

Both have refined the box-bank hardware and software over the years. In each case, there is usually a selection of different door sizes (and hence locker sizes) that can be used for different volumes of traffic. However, in early implementations the configuration couldn't be altered easily, so under-used lockers were effectively wasted.

Both companies have now addressed the need to modularise their box-bank assemblies, making it easier to add more compartments or change those in place. Business Direct's Paul Carvell explains: "We've learned from three years of operation which sizes are most popular in different locations, so in future we'll be able to adapt them more easily in the light of demand."

ByBox is already rolling out a third generation of box banks, having introduced modularity with the second. "We could already modify compartments within vertical stacks," Stuart Miller explains, "but now we can alter the configuration more flexibly across the whole box bank, and add extra units more easily."

The company has the benefit of owning the French plant that actually manufactures the boxes, having bought Logibag – originally a specialist in left-luggage ➤

THE KEY TO UNATTENDED ACCESS

As more parts delivery companies introduce delivery to unattended premises, inevitably the demand for secure, managed access grows as well.

There are a number of suppliers offering solutions for this market. **Traka Access Management**, for instance, supplies a range of electronic key management systems, which can monitor which drivers have which keys, and what they are allowed to access with it. Traka is particularly well established in controlling access to vehicles and mechanical handling equipment, but its systems are also relevant to premises.

BearBox has a system called the Logistics Lock that is specifically designed for unattended delivery access. The electronic lock can be activated by a PIN code, a smartcard or even a call from a mobile phone. Codes can be set to work for a given

period, and can be disabled remotely. It can also monitor which staff member accesses the lock at any given time.

The Logistics Lock is said to work with most popular types of strike lock. The system needs no hard-wiring; it can be battery-powered or even solar-powered. But it does require a GSM phone connection for communication.

If you want an even simpler solution, the intelligent keysafe from **Ahome4it** could be your answer. This system, which has just been given a formal launch after several years in gestation (see *News Update*, page 5), either encloses a physical door key

or can be used to activate a strike lock. In either case, it is accessed via a keypad by means of a PIN code.

The clever part is that the system uses a constantly-changing sequence of codes that are mirrored on a computer at the maker's headquarters. This arrangement means that at any time the company can issue a code that will be valid for a set

duration, without needing to be

in communication with the device itself; and this is reflected in the relatively modest price (around £60 retail).



lockers – a couple of years ago.

Both companies also have international aspirations. Business Direct plans to start freight flights from the Continent in May, working with a joint-venture partner in Germany. "It's the next big thing for us," Paul Carvell says, adding that the company will be offering the same parts delivery service as now, but extending it to clients delivering into the UK from parts centres on the European mainland. ByBox already has a presence in France, and has been gradually taking on a range of pan-European clients such as Fujitsu, Telent and Cable & Wireless.

The company has also progressively added new features to its offering. For instance, by monitoring the comings and goings of parts in real time, Stuart Miller says he can cut out unnecessary movements from the supply chain. Returned but serviceable parts can be directed from one ByBox box-bank site to another instead of back into stock, and stock carried on vehicles can be reduced because availability is guaranteed. One client has even been able to replace existing engineers' vehicles with smaller ones.

Against this high-tech background, one might be tempted to conclude that more traditional parts delivery services are being marginalised, but if so, that process still has a long way to run. Even ByBox's Miller admits: "Last year we sold as many lock-up boxes as electronic boxes. There will always be a place for a simpler solution."

If true, that view perhaps helps explain why rival parts specialists continue to thrive alongside ByBox, BearBox and Business Direct. Although Business Post recently stopped actively promoting its own drop-box, the Canadian eBox system, it is still committed to the parts market itself. "We're continuing to support existing eBox users," a spokesman told us, "but we're not pushing it to new clients."

The company prefers to major on its ability to offer urgent deliveries – using a mix of its overnight network and its UK Today same-day business. It can hold stocks centrally at its Birmingham hub or at small local forward storage bases in London and Glasgow.

MASSIVE SAVINGS

Clearly the more traditional approach to parts delivery still offers attractions in the market. However, it's hard not to see users being drawn increasingly to the high-tech approach as it becomes more firmly established. ByBox can show clear evidence of massive savings, and as more service-oriented businesses understand the benefits, economics and customer demand could tip the balance.

Stuart Miller himself has little doubt about the future of the market. "Within five years, I see lock-box operations falling to about ten per cent of our parts business," he says, "with intelligent box banks accounting for the rest."

Paradoxically, though, he is keen not to appear obsessed with box systems for their own sake. "This market is not about boxes," he insists, "it's about the supply chain." He adds: "Yes, you need the box – it's the core of the system – but what matters is not the thickness of the steel, it's how you use it to improve your efficiency."

The technology-based specialists may not have things all their own way. According to a new report by consultancy Transport Intelligence, global integrators and 4PLs such as DHL, TNT and UPS will be becoming increasingly strong players in the parts delivery market, possibly stealing share from smaller domestic players.

But that analysis may not take account of the international moves already being made by the likes of ByBox and Business Direct – nor the recent arrival on the UK scene of a newcomer, RedPack, which is one of the leaders in the US. It has acquired some of the surviving assets of Collectpoint, the unattended delivery specialist that dropped out of the UK's consumer market over a year ago, and has launched its service nationwide. Collectpoint's speciality was drop-off points in convenience stores and at locations such as filling stations – ideal for parts delivery.

If these companies can hold firm on their present course, combining international reach with clever technology, they stand a fair chance of expanding in a market where price and performance both count. **FA**



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