CIPS **Knowledge BYTES**

Fully loaded

Companies often think they are already getting the best possible deal on freight. But recently new computer-based tools and techniques have been changing the sceptics' minds, as Malcolm Wheatley reports

For freight buyers, matching loads and routes is something of a Holy Grail. And the scope for better matching is huge. Not only is there ample spare capacity through "backhauling" - freight carried on the return leg of a journey when a vehicle would otherwise be empty - but individual carriers have different vehicles, trunk routes, cargo specialities and pricing policies.

Yet unlocking this potential is challenging: even if putting out every single shipment to tender was possible, the management time required to analyse the responses and identify the best ones would be huge.

Hence the growing attraction of computer-based tools designed to do just that - especially the new generation of e-procurement programs that are able to exploit mathematical optimisation techniques, such as "expressive bidding", in which suppliers bid against parts of a request for quotation, or linked "bundles" of bids.

Packaging start

American pharmaceutical giant Bristol-Myers Squibb, for example, last year began using CombineNet, a firm that specialises in such procurement techniques. Chris LaGullo, director of logistics sourcing at Bristol-Myers Squibb, says it first used the tool for global sourcing of secondary packaging (packaging that is not in physical contact with the actual product, such as boxes and bags), where it produced savings of around 15-25 per cent. The company's $25 million air and ocean freight was the second project, he says.

A combination of intra-company traffic, goods inwards from suppliers, and outbound traffic to customers was involved, totalling around 900 routes in all. Just three carriers transported around 95 per cent of the goods. Yet the background to the project was challenging. Ocean freight rates had been rising, and some within the company believed use of the tool risked incurring a rate rise, instead of a reduction.

The decision to proceed was taken because an earlier round of reverse auction sourcing had required carriers to bid for every "lane", or route, leaving a specified geographic region. This approach had forced carriers to bid on destinations that might not suit their business or networks. By contrast, says LaGullo, expressive bidding techniques allowed carriers more flexibility to offer better bids on freight that precisely suited their networks.

So it was to prove, when the 12 carriers involved at the first stage of bidding was finally reduced to the two carriers that got the business. Likely savings of around $2.5 million - around 10 per cent of the spend - are in prospect, says LaGullo. Enquiries made to the existing three carriers before the bidding process as an alternative to holding a sourcing event had yielded a collective saving of around $600,000 to $800,000, far less than the actual saving.

However, it is the intangible benefits that have aroused the most excitement within the company. "We've got real and significant buy-in from our internal customers around the organisation - and you can't put a dollar value on that," says LaGullo. "It's all too easy to get a solution that looks good on paper, yet isn't capable of being implemented - and we've got something that can be implemented."

The importance of gaining such buy-in is a recurring theme among successful freight-optimisation projects. In early 2004, Cargill, a food and agriculture conglomerate, began looking at ways to optimise its bulk liquid road transport within Europe. Cargill was spending 55 million a year on this area - around a quarter of its overall 200 million on European road transport - and management believed scope existed to improve on this.

The project - carried out across six countries, and involving 75 carriers - had several objectives, says Martin Verploegh, Cargill's European procurement manager. But simply squeezing carriers' profit margins, or rationalising the supplier base, weren't among them. "Our goal was to improve our management of freight transport - determining, on a supplier-by-supplier basis, the best fit between our requirements and their capabilities."

Sourcing was fragmented, with individual country-based transport managers dealing with carriers individually. "Instead, we wanted to be able to present a single face to the carriers," he says. Senior management within Cargill were very specific about procurement's role, he adds: "We were to be change catalysts, working with both internal customers and carriers, in order to identify opportunities to capture value."

The project delivered a saving in freight costs of 6 per cent a year - no mean feat in a market where most shippers are experiencing price increases. However, the bigger prize extends beyond just cost savings, he stresses. Vehicle utilisation has increased, and transport management has improved.

Further projects are now underway, including one addressing Cargill's entire dry van shipments in the US.

Fully loaded

Companies often think they are already getting the best possible deal on freight. But recently new computer-based tools and techniques have been changing the sceptics' minds, as Malcolm Wheatley reports

CIPS **Knowledge BYTES**

Tailor-made tools

While some companies are pressing general e-procurement into service to reduce freight costs, others are using tools specifically aimed at the haulage market.

Georgia-Pacific International, one of the world's largest manufacturers of tissue products, decided to apply e-procurement techniques to its European transport operations after seeing the results delivered elsewhere in the business, says Patrick Jahan, supply chain director. The company quickly realised that its existing auction-based e-procurement tool, which had delivered these gains, was not going to be up to the job of optimising the company's complex transport spend through tallying its numerous loads and routes with its suppliers' capabilities.

So the company used e-auctions provider Freight Traders on Georgia-Pacific's full-truck shipments across Europe. This network comprised around 100 "lanes", with a total annual spend of about €9 million. Around 20 per cent of the lanes made up 80 per cent of the volume.

"We were convinced that we were already doing a good job, but the results we achieved surprised us," says Jahan. Once the various bids were assessed, double-digit cost reductions were on offer, he says.

While there is inevitably an element of competitive bidding involved, the big savings come not from squeezing suppliers in price, but matching loads and routes so as to exploit untapped opportunities.

When Freight Traders worked with children's food producer Numico, the online tendering system drew attention to a carrier's trunk route that went almost past the factory gate.

This surprising result challenged the scepticism of Geoff Norris, international transport manager at Numico. "We decided to try the system out on a route that I had personally controlled for six or seven years - road freight being shipped from the UK to the Netherlands," he says. "I was fairly sure that the rates we were getting couldn't be bettered." But bettered they were - by a reduction in price of more than 30 per cent.

The use of the system has since significantly expanded, both at Numico and Georgia-Pacific. Numico has recently embraced sea freight. And in a second project at Georgia-Pacific, between its Dutch mills and customers in Germany and Belgium, the company made double-digit percentage reductions.

The success and expansion of these programs may bring the freight buyers' Holy Grail a little closer. It may also demonstrate that however good a company believes its freight procurement practices to be, new computer-based tools and techniques are often able to offer significant improvements.

FREIGHT SAVINGS

- Loads and routes need to be matched so as to exploit untapped opportunities;
- There may be spare capacity through "backhauling" - freight carried on the return leg of a journey when a vehicle would otherwise be empty;
- Companies need to recognise that different carriers have different vehicles, trunk routes, cargo specialities and pricing policies - for example, a trunk route may pass near the factory;
- The new generation of e-procurement tools uses mathematical optimisation techniques to unlock all this potential;
- One such technique is "expressive bidding", whereby suppliers bid against parts of a request rather than a quotation as a whole. This often involves linked "bundles" of bids, which enables suppliers to offer better bids on freight that suits their networks.

Malcolm Wheatley is a freelance business journalist

Taken from Supply Management magazine, archived article, Features, 22 September 2005

THE CHARTERED INSTITUTE OF PURCHASING & SUPPLY®