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Frontline SOLUTIONS

Technologies for Extending Information Management

incorporating
**AUTOMATIC
ID NEWS**
EUROPE

Trouble on the final stretch

The difficult journey
to the e-shopper's door

WHERE LEADERS CAN LEAD

Parcel carrier focuses on
new ideas, not paper work

FREE BUT CONNECTED

Wireless local area networks
offer fast and accurate
data transmission

SOFTWARE FOCUS

Are you ready for
the e-chain?
Analysis and cases studies

■ SOFTWARE ■ MOBILE COMPUTING ■ EDI/E-COMMERCE ■ RFID ■ SCANNERS ■ PRINTERS ■ RECRUITMENT

Frontline^{SOLUTIONS}

Technologies for Extending Information Management

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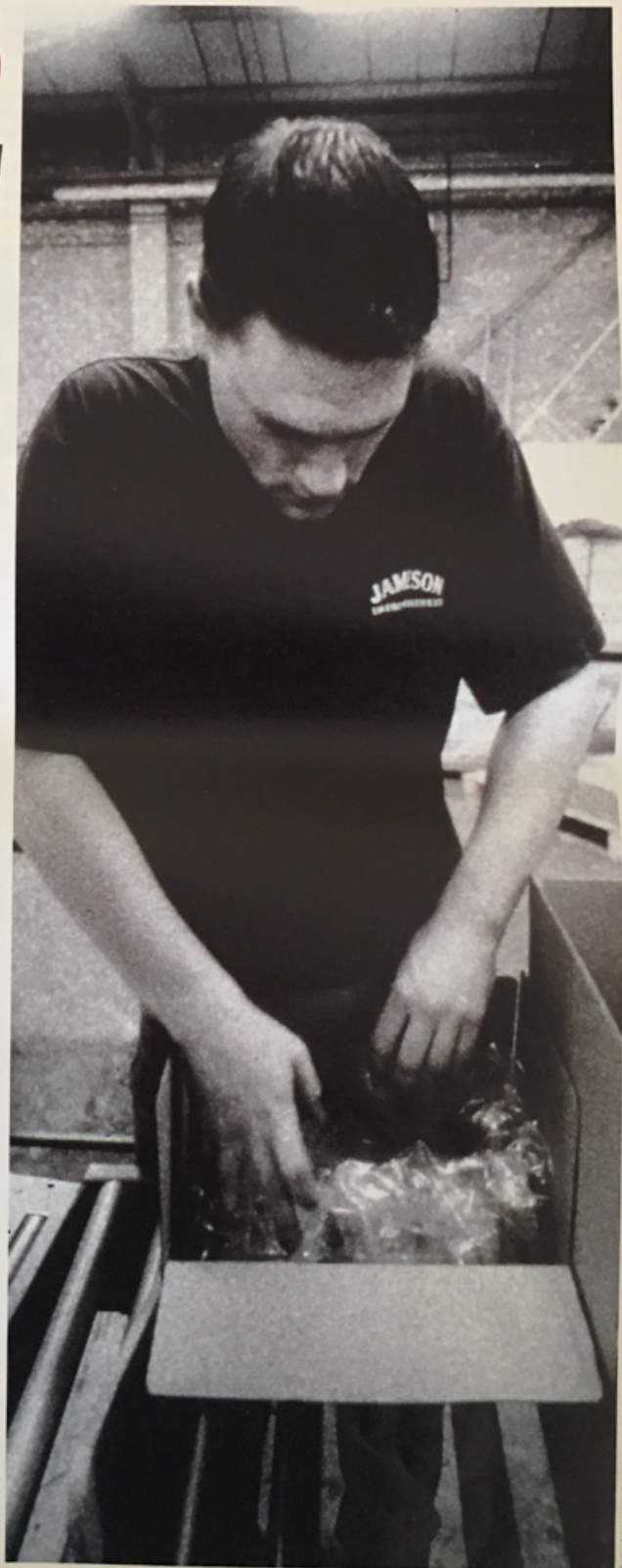
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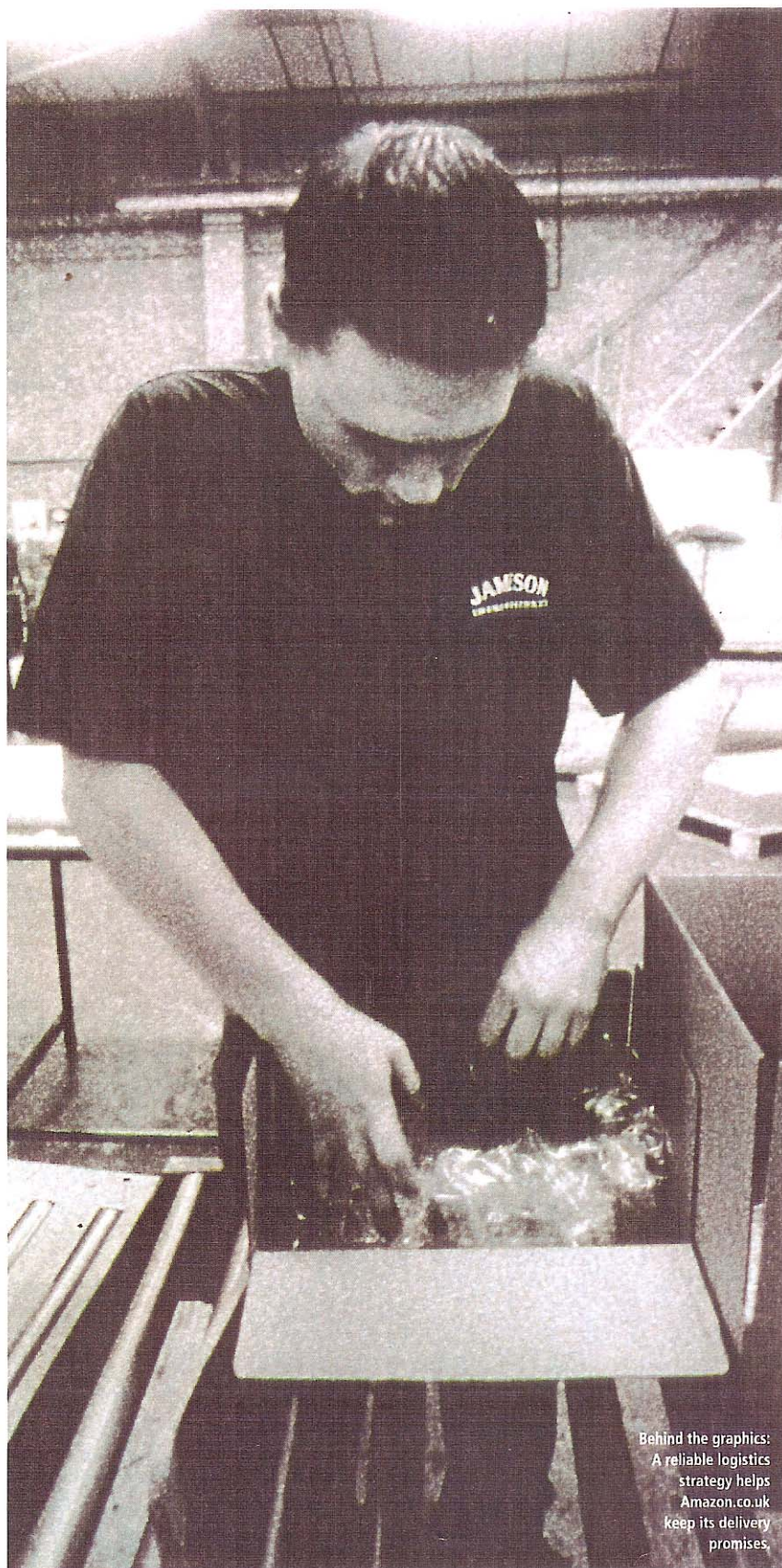
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Behind the graphics:
A reliable logistics
strategy helps
Amazon.co.uk
keep its delivery
promises.

The last kilometre to the customer's door proved too much for e-tailers last Christmas, when 68% of them failed to deliver within 48 hours. Only good logistics can tie a fancy website to a supply chain that works.

online but not On time

By Salina Christmas

It's a case of bad traffic. More logistics than bandwidth. We were warned by the likes of CEST (Centre for Exploitation of Science and Technology, London, UK) that online purchasing would give logisticians a massive headache, and it did. The existing distribution system, which relies on a sophisticated hierarchy of warehouses, regional distribution centres, depots and retail outlets, is having trouble dealing with the new delivery model that bypasses the middleman.

Nice site, shame about the service

In the excitement of getting their services online, dot.coms didn't get their supply chain in line. They gave it a second thought only — as one source puts it with regards to toysrus.com's delivery blunders when it was faced with "greater demand than expected".

Toysrus.com wasn't the only dot.com that found logistics to be a headache. Last e-Christmas saw 68% of European online retailers failing to respond to customer service within 48 hours, reports Jupiter Communications (NUA, Vol. 5, Jan 4, 2000). Andersen Consulting reports that while

1: Ditch the warehouse. Pick orders straight from your supplier.

The warehouse, says Neil Thall, is a waste of time. "Too many risks," he says. "The distribution centre will survive because it increases logistics efficiency (but) the warehouse degrades the value of the product because the product decreases in value as it gets older." Case in point: fashion products.

"Ten years ago, you ordered a certain fashion a year in advance. The order sits in the warehouse or inventory for a while. Today, the order can be taken up in as early as three months. In the near future, this period might be reduced significantly and (goods will) flow directly from raw material through to the consumer with no stop-off points and no delay."

Traditionally, the warehouse has been a stock buffer point. Removing it requires suppliers to know exactly what retailers need and when. Internet technology can help achieve this.

A good example is provided by Star Wars toys. A stock control system employed by Argos actually helped its supplier, toy manufacturer Hasbro, spot the most popular character in the last *Star Wars* movie. Argos used collaboration software from Egos (Leatherhead, UK).

"No one knew how many pieces of £7.99 action figure you can sell in the summer," says Hasbro general manager, Alistair Richards. "It was literally between two and four weeks after the film release that we began to get that indica-



Darth Maul says two words in the latest *Star Wars* film, but he outsold other characters by five to one. Hasbro could keep up with unpredictable demand thanks to Egos Collaborator.

tion from other retailers from their EPOS data. However, from Argos, because of the website and day-to-day information, we immediately saw that we went from selling 50 figures to 200 figures to 500 figures. Darth Maul says about two words in the film, but he outsells other characters by about five to one. And we immediately knew that."

LINK IT TO THE SUPPLY CHAIN

Back-end sales operations such as order-taking must go together with the supply chain like peas and carrots. To achieve its full potential, the supply chain system shouldn't be confined to pick and pack.

It has to manage carriers, harness radio frequency communications and enable palletization and barcoding.

We're not short of ERP systems that can do this. Kewill System's (Walton-on-Thames, UK) Clippership is one that can be integrated with your supply chain.

Used by major carriers such as FedEx in the US, Clippership selects the most cost-effective carrier for your package on that route, on that day.

All you have to do is to enter the weight and destination of the package into the system. Clippership will then automatically handle barcode label printing required by that particular carrier.

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Kewill ☎ +44 1932 233 200 • 86

2: Be creative and flexible in supply and order management.

DON'T GET STUCK WITH A STYLE:

Dot.coms have to consider how to deliver to congested cities, to sparsely populated areas, in small or big drops. The various e-fulfilment systems on offer can help you to execute this task.

But ultimately, dot.coms have to be honest with themselves. "Don't set unrealistic expectations that you may not be able to deliver against," says Ted Maley, EXE's (Bracknell, UK) marketing manager. "Don't be constrained in thought. Be creative in picking and delivery models."

You deal with shoppers who are often at work when delivery is required, making delivery windows tight. Maley suggests EXE's Lifestyle Collection Point as an alternative, a concept that allows dot.coms to deliver to a company reception area or even customers' car boots in their car parks.

B-2-b delivery can operate on the same idea. Manufacturers can drop items at an agreed drop-off point like a coded locker or a 24-hour picking area where resellers can collect at their convenience.

A similar idea is taking off in Japan, which sees konbini, the convenience store, as the drop-off point for customers to pick up goods. Airplane tickets, groceries, books and music downloaded from in-store kiosks can be bought this way. It's not home delivery, but it's an option that works.

GO THROUGH A CHANNEL: Online shoppers are difficult, erratic and impatient. They surf for two titles at www.books.com, make the order by post and then cancel one by phone. Online retailers deal with such individuals by the millions.

Unfortunately, retailers have no choice but to correspond their supply strategies with this appalling shopping habit. If they don't, tough. Customers go somewhere else.

"Retailers must approach their business on customer's terms," says Cecile Dorvault, Retek's (Minneapolis, Minnesota, USA) EMEA marketing director. "Rather than adapt the inventory-driven models with aggressive push methods, retailers need to re-engineer their internal systems with the priority of pull-responsiveness to changing customer trends."

Retek proposes a "call centre" package that collects and processes entries, customer service and fulfilments from all channels — web, phone, TV and kiosk — through one centralized system. Distribution and logistics can be put in one place through a direct sales channel. "This," says Dorvault, "will surely be on every e-commerce retailer's Christmas list next year."

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music products took more than a week to be delivered, electronic goods were delivered in 3.9 days. Poor delivery has damaged the customer-merchant online relationship despite euro 790 million (US\$797 million) being made in Europe from the Christmas 1999 sales.

Get the traffic going

Some of us are already wondering if cyber-retailing is hot air. If it sounds like hot air, that's because e-commerce success stories read like the Godzilla movie press kit, peppered with hyperboles exaggerating the potentials of electronic transactions. Aptly, the failings of e-commerce and dot.coms are magnified to monstrous proportions.

But experts are optimistic that if dot.coms have the foresight to invest in a reliable distribution system that allows a flexible picking and supply strategy, e-commerce doesn't have to be a logistics suicide.

Look after your supply chain, and your supply chain will look after you. Spend more time on good inventory management and supply strategy than on fancy websites, says Neil Thall, executive vice president of Manhattan Associates (Atlanta, Georgia, USA). His company supplied

toysrus.com with PkMS, a warehouse transportation management system.

"Know your backroom operations," he says. "Pay more attention to how you're going to pick and deliver the order. Don't just focus on the more glitzy Internet aspect like the screen."

He added: "You have to consider whether there is a low or high demand for certain products pitched on the website."

Success depends on supply chain

Delivering a forecast for the next Christmas season is impossible as business-to-business (b-2-b) and business-to-consumer (b-2-c) e-commerce has a short history (in other words, not many success stories to tell). What analysts can tell you is that there is money to be made in e-commerce. In France, the US\$158 million spent by online shoppers in the past six months is expected to double with 26% of users planning to shop online in the next six months. The euro

Know your backroom operations.
Pay more attention on how you're gonna pick and supply the order.
Don't just focus on the more glitzy Internet aspect like the screen.

Neil Thall, executive vice president, Manhattan Associates



790 million European online revenue is predicted to reach euro 18 billion by 2003.

There's no better time to optimize your service for e-commerce than now. But go online and the well-being of your business will depend much on how well you plan your distribution networks.

To save you from learning the hard way, we asked dot.coms, experts and system integrators for some after-Christmas hindsight. We hope it will take the bumps out of Santa's sleigh-ride next year.

3: Track orders with portable terminals with access to the Net.

PAPERCHASE DOESN'T WORK: How do you locate a book on 87 km of shelving in the distribution centre? You don't. You leave that to your WMS and your radio frequency (RF) terminals. Borders.com, the online book and CD seller, uses 115 Intermec RF units and Catalyst International's WMS to track inventory in its 18 600 m² distribution centre.

Paper doesn't fit into this scenario. Paper is slow, expensive and repetitious. It's not dynamic, unlike portable RF termi-

nals with access to the Net that are faster and cheaper to run.

MOBILIZE E-COMMERCE: Tesco Direct, the online home-shopping service, uses a website to tell customers about their orders. A variety of technologies enable this. For instance, middleware from Symbol Technologies (Winnersh Triangle, UK) links portable data terminals to a wireless local area network. Vehicle routing software from Paragon (Dorking, UK) helps



Borders.com: How do you locate a book on 87 km of shelving? With software and portable terminals.

Tesco track its vehicles.

On a b-2-b level, portable terminals enable Tesco sales assistants to contact suppliers directly if, say, the cans of baked beans on Aisle 13 are running low.

Another online initiative featuring portable terminals is the project YourSherpa.com, which allows shoppers at an American mall to select and scan items from multiple stores through an integrated barcode scanner and wireless communication using the SPT 1740.

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Circle 9

4: How do you handle returns?

The answer shouldn't be "What?". Last season's gripes were mainly about inadequate return procedures. Although sales order, inventory control and tracking are done electronically, return procedures are still a Pony Express job.

Tesco Direct has a neat way of handling returns. "When a grocery order arrives at a customer's home, the driver checks the contents of the delivery compared to the original order. Any problem with the order is dealt with at home by the dispatcher," says Russell Craig, Tesco's spokesperson.

If you deliver within the radius of 40 km, that's fine. But it won't do if your customer lives in La Rambla and the product he bought online comes through a Hamburg distribution centre.

GO TECHNO: At this point, most dot.coms would rather leave it to the post office. Some play smart. They hire 3PLs to do the work (more in this vein later). Some tell us they do have a return procedure, but they won't spill the beans. Amazon.co.uk can't elaborate on the technology involved in handling returns "as the information would be too valuable for competitors".

Returns involve two things: refunding the money and taking the goods back into stock. With regards to the

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Circle 10

latter, the scanning technology employed by the Helsingborg City Library in Sweden might give us an idea how a commercial return-and-replace procedure works.

The library installed a modular automatic return system that accepts and sorts returned books.

The books are put in a sorter. A DS45A laser scanner, from Datalogic (Bologna, Italy) reads the barcode labels on the back of the books, which are placed upwards.

This scanner does 500 scans/s at a distance of up to 950 m.

The label specifies which category the books should go to in the automatic sorter, and the books are returned to their rightful place.

With this system, the library handles some 700 returns per hour.

You don't wish to handle returns at that rate. Perhaps you won't have to. But in any event, it's wise to have an automated return facility on your side.

Datalogic ☎ +39 051 645 9211 • 93



Unattended scanning systems, like this one at the Helsingborg City Library in Sweden, can speed up the return process.

5. Leave it to the 3PLs.

Sometimes it's better to leave the hard work to others. "You don't have to have a distribution centre," says Neil Thall. "Tying your process in to a fulfillment process is a good alternative."

"Talk to a 3PL," says UPS managing director, Bill Caplan. "It is the 3PL that has the vision, the thinking, the resources, the experience, the management expertise and the technology to customize and deliver an end-to-end chain solution that meets your specific needs."

UPS services are offered as a part of the e-commerce packages offered by the likes of Atos and Intershop. In anticipation of the e-commerce boom, UPS, together with Hewlett Packard, developed a digital-delivering system for sending and tracking paper documents over the Net, putting the logistics provider ahead of the others in terms of real-time customer interaction.

The company's online initiatives earned it the appointment as the 3PL

provider to 3 Suisses.com, France's official World Cup '98 online merchandise shop.

Between March and October, the site received 1.2 million visitors from the Americas to the Far East.

UPS also provided 3 Suisses.com with a multilingual b-2-c platform that offered real-time interaction, packaging, dispatch and package tracking.

In collaboration with Siemens, Microsoft, IBM, Digital and Oracle, UPS helped kicked off Magellano e.shop, Italy's premier online mall that offers 150 products by more than 50 companies.

Another UPS partner is Thestore.adidas.com (right). Adidas-Salomon AG's US-based online shop, which also uses FedEx to deliver its merchandise. Thestore.adidas.com rec-



So many books, so little time. Amazon.co.uk wouldn't be able to handle international priority deliveries without 3PL.

ommends customers to use these couriers or similar services for returns as the 3PLs provide traceable shipments.

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