



Freight Traders:

New B2B Exchange Links Shippers and Carriers

Wohl Associates is a consulting and market research firm whose focus is on new and emerging technology and new market formation

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EXECUTIVE SUMMARY

e-business Case Study: Freight Traders

Freight Traders, a subsidiary of Mars, Incorporated, is a UK-based trading exchange that brings shippers and carriers together to do smarter, more effective business.

Based upon a 1999 survey indicating that as many as 27% of the trucks in Europe travel empty — not counting partially empty vehicles — Freight Traders decided to create an Internet-based cargo matching scheme that maximizes the use of spare capacity, through the use of four different processes — Open Auctions, Closed Auctions, Tenders and Benchmarks.

Freight Traders chose IBM to develop, host and maintain its e-marketplace trading exchange which is powered by IBM WebSphere Commerce Suite and DB2 Universal Database and is hosted in an IBM server farm on RS/6000 servers.

The Freight Traders solution takes advantage of Mars' logistics expertise by giving shippers access to a larger pool of carriers and an informed buying function, while buyers receive easy access to a global market of suppliers and are able to improve the efficiency of their equipment.

The Freight Traders e-business Solution

Application

- B2B trading exchange for shippers and carriers

IBM Technology

- IBM WebSphere Commerce Suite
- IBM DB2 Universal Database
- IBM RS/6000 Servers

Services

- IBM Global Services

Freight Traders Business Benefits

Shippers:

- Access to a larger pool of carriers
- Professional assistance through Freight Traders' own logistics experts
- Smart, fast, informed buying function

Carriers:

- Improved customer contact opportunities
- Access to a global market of suppliers
- Improved equipment efficiency
- Reduced operating costs and marketing overhead

FREIGHT TRADERS

Who is Freight Traders?

Freight Traders™ is an Internet-based business-to-business trading exchange that brings shippers and carriers together to do smarter, more effective business. Freight Traders connects shippers with cargo to carriers with the capacity to carry that cargo. The UK-based company started trading in May 2000 and is already working with many leading shippers and carriers.

Transactions are based on either a "reverse auction" procedure (where the bids get lower until a deal is struck), or a structured tender. Using Freight Traders' site or entering auctions is free until a deal occurs. Freight Traders then charges a small commission fee to the carrier, based on the agreed upon shipment cost. Additional services are based on consulting expertise and extensive support. This includes benchmarking and tendering, which are available to all registered users.

Freight Traders is a subsidiary of Mars, Incorporated, one of the world's largest multi-nationals, distributing goods in over 100 countries and five continents. The business is also endorsed by the FTA (Freight Transport Association), the UK's leading transport trade association.

The screenshot shows the Freight Traders website interface. At the top, there is a navigation bar with the logo and links for 'My Profile', 'My Gallery', and 'Log Off'. Below this is a section titled 'Your Freight' with a date and time display (13/09/2000, 16:20 GMT). A search filter is present: 'Display Freight for Shipping After' with a dropdown menu set to 'Jun' and the year '2000', followed by a 'Go!' button. On the right side, there are links for 'View Freight', 'Post Freight', 'Auction', 'Tender', and 'Benchmark'. The main content is a table with the following data:

Earliest Ship Date	Ref. No/ Type	From ==> To	Best Bid	Auction Status
17/09/2000	414874 Open	London(GBR) Brighton(GBR)	No Bids EUR	Future
01/10/2000	414875 Closed	Berlin(DEU) Milan(ITA)	No Bids EUR	Future
01/01/2001	414873 Tender	Antwerp 19(BEL) Duppigheim(FRA)	No Bids EUR	Future

At the bottom of the page, there is a footer with the text 'a subsidiary of Mars, Incorporated', 'TM Freight Traders is a trademark of Mars, Incorporated. © Copyright of Mars, Incorporated 2000.', and the website URL 'www.freight-traders.com'.

Mars, Incorporated is a world leader in each of its main businesses: pet care, snack foods, meals, electronics, and drinks. Mars has annual sales in excess of US \$13 billion, employs over 28,500 associates and has manufacturing facilities and offices in more than 60 countries. Mars' logistics and procurement expertise and high operational efficiency are widely respected.

Mars has a distinctive way of doing business. Although it is a diversified multi-national corporation, Mars is privately owned, giving it the freedom to optimize its relationships with the individuals and companies with whom it does business. This philosophy extends to Freight Traders who will encourage the fastest and most cost-effective solutions for both parties to trade.

What is the Business Problem?

A 1999 survey of truck usage within the European Union (EU) indicated that as many as 27% of trucks in Europe are travelling empty, not counting partially empty vehicles. Any reduction in this volume of wasted traffic will benefit other road users and the environment in general, while improving the economics of both carriers and shippers.

If more trucks continue on their journeys at full capacity, total truck usage will be substantially reduced. Since total volume of traffic remains the largest contributor to air pollution, Freight Traders offers an effective means of decreasing that pollution.

"Freight Traders' Internet-based cargo matching scheme is bound to make a significant contribution to improving the environment on and around the roads of Europe," says Garry Mansell, Freight Traders' Managing Director. But beyond the environmental advantages of reducing the number of empty trucks, the financial advantage to the carriers and shippers is significant.

Freight Traders uses Internet-based technology to provide its services, giving shippers and transport companies the opportunity to maximize revenues and efficiencies. The Internet offers companies, in any location, instant contacts and communications for the exchange of any type of data and services.

- Freight Traders enables a company — with cargo to move — to "advertise" this fact to the global transport community in a controlled manner and request bids to handle the cargo movement.

-
- Bidding can be open or closed — open to all or limited to a preferred list of bidders. In closed bidding, the shipper can select any bid or bids that meet the shipper's requirements.

A company using the Freight Traders Web site benefits from Mars' extensive experience and expertise in freight management and game theory which is evident in this system. Using the system gives cargo owners much greater empowerment over prices, services and availabilities — while transport providers compete on a more level playing field, with the benefits of reduced costs and improved efficiencies. Along with the environmental benefits, this is a "Win, win, win situation for all," claims Garry Mansell.

Mansell emphasizes that although the Web site is the enabler of business transactions, Mars' experience is not vested in the Web site alone. Freight Traders is a business that consists of real people, with real expertise who are readily accessible by many means — on the site, via e-mail, by phone or face-to-face.

While Internet access is available around the world, the service began with operations in Europe, the Middle East and North Africa, with deep-sea services for container shipping companies operating on the Atlantic and the Pacific in 2001. Eventually, it is expected that Freight Traders will become a global service network for cargo owners and transport companies.

The Freight Traders site was developed with the help of users and providers of transport services, who acted as advisors during the development process. In addition, Freight Traders is in partnership with the Freight Transport Association (FTA) and is linked to the FTA's Supply Chain Network which provides relevant and timely news alongside discussion forums related to the logistics industry.



Choosing IBM

To build a complex trading site for global access and competitive bidding required a technology partner with the experience and skill to ensure its success.

Freight Traders chose IBM to develop, host and maintain its e-marketplace solution because of the reliability and functionality of IBM technologies, as well as its extensive e-business and e-marketplace expertise. Freight Traders also recognized IBM's understanding of the distribution sector and its comprehensive range of services — from development to application hosting and maintenance. The solution is based on IBM's WebSphere Commerce Suite and DB2 Universal Database and is hosted in an IBM server farm on RS/6000 servers. It incorporates a specially developed reverse auction application and a sophisticated tendering module.

The choice of IBM as the partner for the Mars' e-business solution was based upon the following business criteria:

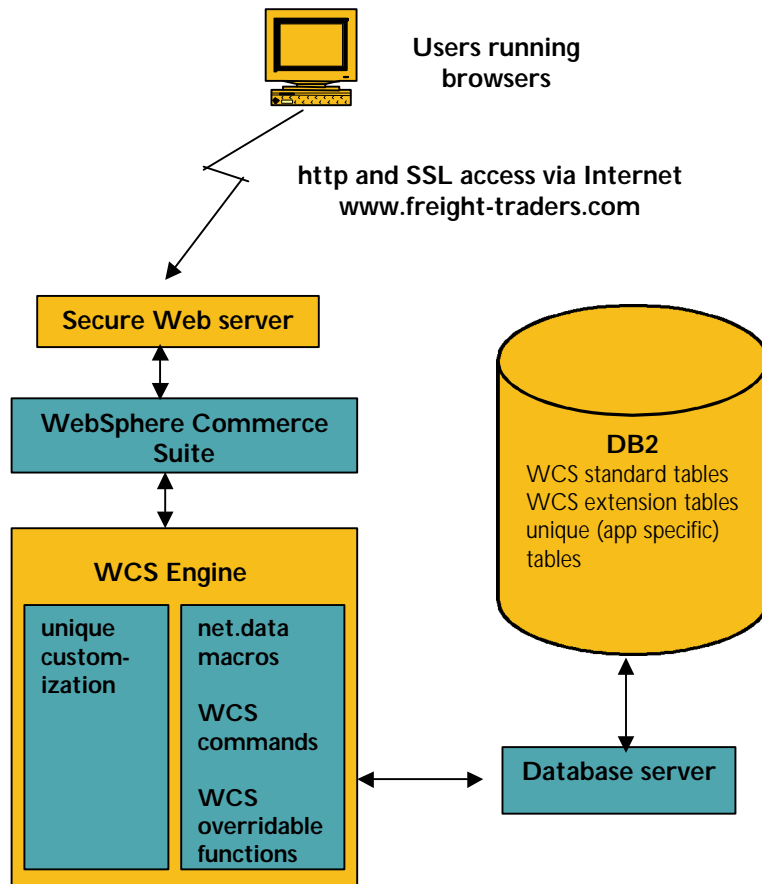
- The quality of the IBM people who came to plan and ultimately work on the project.
- IBM's significant understanding of Freight Traders business needs.
- IBM architecture, offering a consistent yet flexible solution, which could be adapted to meet the security and reliability demands of a business-to-business (B2B) environment.
- The full range of services that IBM offered — from development to hosting to application maintenance.
- Mars determination that WebSphere Commerce Suite was the best available solution in the marketplace.
- IBM's assurance that Mars' tight timetable would be met — within budget.

IBM also provides the reassurance of over 80 years of experience and a name synonymous with quality and stability. Mars believes that this gives Freight Traders' users additional confidence in the new venture.

When asked about the choice of IBM, Garry Mansell says, "IBM is a world leader, encouraging e-business. With their proven track record, IBM is a well-matched partner for Freight Traders. This is a significant investment with a real business opportunity. We needed a trusted partner on the technology side. IBM brought that skill. Some of the auction technology was a new concept. Making it work required expertise. IBM brought that expertise."

The Implementation Process: System Architecture

System Architecture



WCS = WebSphere Commerce Suite

IBM built the Freight Traders site from the start, including the design of the application; development for release in two phases; hosting the site using IBM's Managed Operations; and application maintenance. Freight Traders' solution employs an IBM RS/6000 processor, AIX, and WebSphere Commerce Suite. Freight Traders' marketing partner, Perspectives, created the look and feel as part of an overall approach to consistent corporate branding, both online and offline — from business cards to advertising and the Web site.

According to Andy S. Roberts, IBM Business Innovation Services Executive - Distribution Sector: "Freight Traders is an example of the type of e-marketplace solution that can make a real impact. It not only incorporates an innovative reverse auction solution, but also has sound financial backing from Mars and the support of the leading industry body, the FTA — key ingredients that should ensure its success."

A typical transaction proceeds as follows:

- First, there is a public site where both the shipper and the carrier can start the registration process.
- This becomes a secure site for company information.
- The Freight Traders administrator for the shipper or carrier is e-mailed a login name to use, which enables the company profile and user names to be managed.
- A transaction occurs through one of four processes.

The Transaction Process

There are four types of available processes: Open Auctions, Closed Auctions, Tenders, and Benchmarks.

Open Auctions

In an Open Auction, any buyer and any seller may enter. Identities of shippers and carriers are not revealed to each other during the auction. Because this is a reverse auction, the lowest bid wins. At the completion of the auction, the shipper and the winning carrier are revealed to each other. Shippers have the ability to exclude carriers from these auctions and carriers have the ability to exclude shippers whose freight they do not wish to bid for or carry.

During the auction, both shipper and carrier can see the value of the lowest bid but not the identity of the carrier who made it.

Concealing the identities of participants is a common Open Auction technique.

Closed Auctions

In Closed Auctions the identity of the shipper is revealed to invited carriers before the auction starts. Closed Auctions are often used when

Freight Traders is acting as a consultant to the shipper. At the completion of the reverse auction, the shipper is shown the lowest bids made by each of the carriers and the shipper is free to award business to one or more carriers. The lowest bid will not always win since the shipper may have a carrier preference.

During the auction both shipper and carrier can see the value of the lowest bid but not the identity of the carrier who made it.

Shippers select which carriers are invited to take part in the auction.

Tenders

In Tenders the identity of the shipper is revealed to invited carriers before the Tender starts. At the completion of the Tender the shipper is shown all the bids made by each carrier and they are free to award business to one or more carriers. The lowest bid will not always win.

During the Tender the shipper can see details of bids made including the identities of the carriers. Bidding proceeds with carriers able to modify bids both up and down throughout the course of the Tender. Carriers cannot see the identities of other carriers who have made bids. At the end of a Tender the Freight Traders Tender process ensures that shippers are able to compare bids on a "like for like" basis.

Shippers select which carriers are invited to take part in the Tender.

In use, this process has been proven to cut the time to run complex freight Tenders by greater than 50%.

Benchmarks

Benchmarking permits shippers and carriers to gain information about the market price for freight on a particular route. In Benchmarks no actual freight is purchased and the identities of the shipper and carrier are not revealed.

During the bidding no feedback is provided on the value of bids made. When the Benchmark is completed both the shipper and the carriers who have participated get to see the value of all bids made. For carriers their own bid is highlighted.

As the identities of shippers and carriers are not revealed in Benchmarks, all carriers can participate. In return for the effort in making a bid, carriers can see their market position.

Shippers have used this application not just to check prices but also to review their own networks and to assist in strategic sourcing decisions.

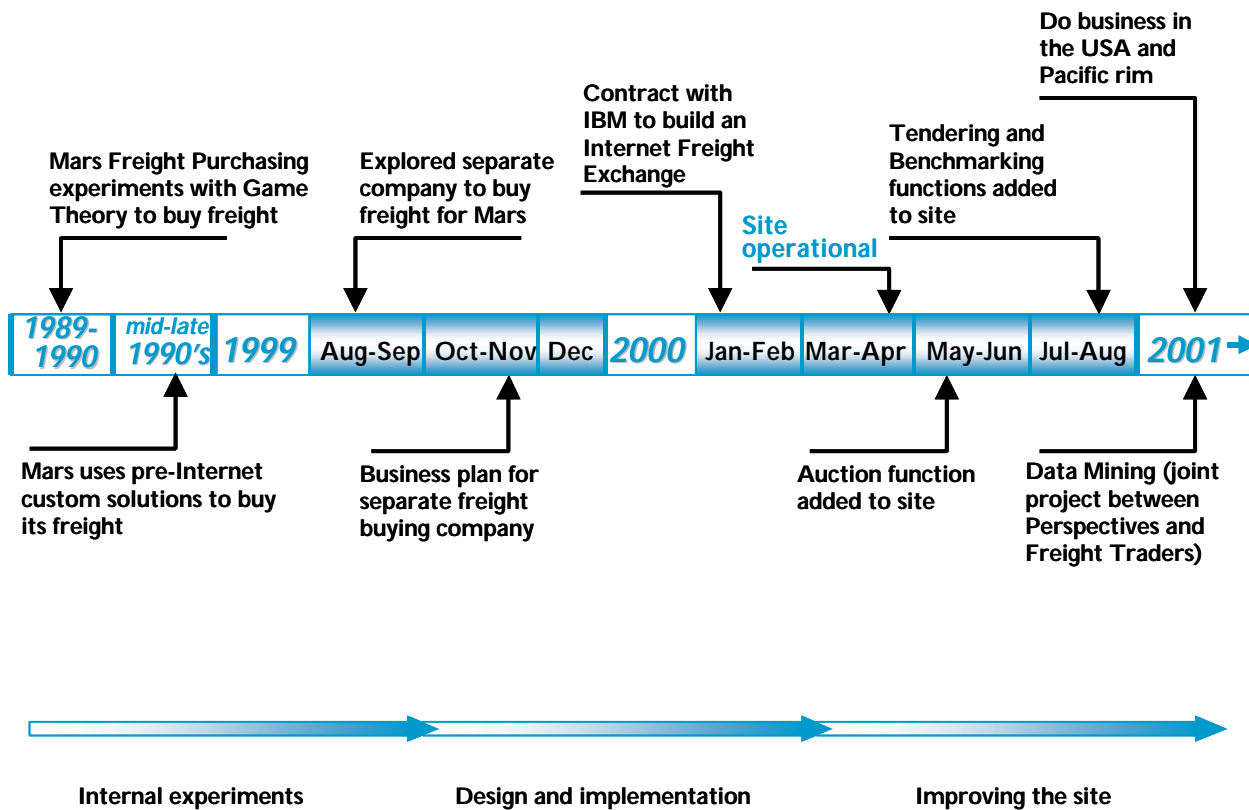
Lessons Learned

Trust of carriers by shippers was one of the biggest issues for the Freight Traders site. Mars is a known quantity — a large, well-respected company with recognized expertise in logistics.

IBM's participation as a partner in building the system reinforced carrier and shipper trust.

Freight Traders initially offered open and closed auctions. Tendering was added to complete the Freight Traders offering to the transport industry and is the largest business segment today.

Timeline



Current Status

Freight Traders went live in May, 2000, and is revolutionizing the freight industry with its services. Over 400 companies have registered with the new trading exchange. Two-thirds of the shippers are multi-nationals or based outside the UK. They cover a wide range of industrial sectors including the retail, food manufacturing, automotive, chemical, textile and construction industries and have a combined freight buying power of more than 1 billion British Pounds (US \$1.4 billion) a year.

Today shippers are moving confectionery, dog food, retail goods, chemicals, and consumer goods as well as furniture and electronic parts through the exchange. When there is a product to move, and a carrier is needed, the seller can request that particular carriers be automatically informed. There is a great deal of geographic information in the design to aid in efficiency.

Joe Critchley, Senior Market Manager of Freight Traders, said, "This is really a virtual marketplace; it is almost a perfect market. For example, the lorry may be taking goods from Edinburgh to London and then running back empty. The carrier can then bid for any return load in order to fill the lorry bringing in revenue, lowering overall shipping costs, and benefiting the environment. It is an almost perfect solution."

Business Results: Goals and Benefits

Freight Traders view their solution as having benefits for both shippers and carriers. Shippers have access to a larger pool of carriers and a smart, fast, informed buying function. They can specify approved carriers for easier tendering and have access to professional assistance through Freight Traders' own logistics experts.

Carriers have easy access to a global market of suppliers and are able to improve the efficiency of their equipment. They have reduced operating costs and marketing overhead as well as improved customer contact opportunities.

All of this gives Freight Traders a very positive outlook on the future.

"We're very confident that our success so far is just the beginning, and we look forward to meeting the needs of the global freight community for many years to come," says Garry Mansell.

Future Plans

Freight Traders is initially operating in Europe and the Middle East. Deep-sea services for container shipping companies will begin operating on the Atlantic and the Pacific routes next year. This will make Freight Traders the first global one-stop-shop freight marketplace.

Garry Mansell, Managing Director, said, "We have generated an enormous amount of interest in our approach throughout Europe and we are one of the few companies within our sector who are actually trading and securing freight contracts for our customers. This year will see us put something like \$100M worth of freight through our site.

"We are now looking to expand our geographic coverage to the rest of the world, but this will be done in a controlled manner. We see ourselves as a people business, and the people we employ represent our greatest asset. All are proven logisticians with many years experience, and finding similar individuals will dictate the pace of our roll out. We are also receiving many requests at the moment to offer our services to a number of industry specific vertical exchanges, and we see this as being a natural extension to our offering. Other services we offer and developments we make will be dictated to us by our customer base."

Freight Traders is looking to provide the broadest range of services but under the direction of its customers. This includes helping a carrier become more competitive. It also includes logistics consulting to shippers and carriers.

Perspectives advises Freight Traders management on opportunities in its customer base. "We're already entering a programme of data mining, with the wealth of information that Freight Traders generates. The purpose of this is both to look at how our customers are using the service and at how we can continue to develop the site and the service as a whole," Mike Cullis, of Perspectives, concludes.

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