Before last year’s dot-com meltdown, one of the most hyped areas was large industry-based business-to-business (B2B) marketplaces. Most of these have either failed or are struggling. Instead, the growth today is in less ambitious online auctions where individual firms, increasingly having to focus on costs, seek suppliers of the products or services they need. FreeMarkets, growing fast though still unprofitable, is the leader in this growing field. This case discusses the problems and potential not only for FreeMarkets itself but also for the buying and selling companies which use it.

Since last year’s dot-com meltdown, the number of pure play business-to-business (B2B) e-commerce start-ups has declined dramatically amidst industry uncertainty, unsustainable business models, and the evaporation of venture capital funding. Organisations such as Forrester and the Gartner Group estimate that fewer than half of the B2B e-marketplaces in existence in late 1999 will survive beyond 2001. Industry-based mega-exchanges, such as the automotive industry’s widely-publicized Covisint, are only stumbling along: complex issues relating to regulation and lack of co-ordination amongst participants have slowed implementation. The corporate world has gradually realised that integrated e-procurement and the development of industry exchanges might be a much longer and more difficult road to bottom-line savings than originally anticipated.

In this broad environment of uncertainty on the future of B2B, some companies have chosen to develop their own e-marketplaces: Walmart, for example, with its RetailLink. Another approach is the B2B online auction. Public and private sector use of online auctions is growing exponentially, with buyers and sellers using systems from vendors like FreeMarkets, Ariba and CommerceOne.

This article discusses the growth of FreeMarkets, the world’s largest B2B online auction provider and arguably the most successful B2B online marketplace. It explores the company’s business model, and the ways in which online auctions can affect B2B procurement. In particular, it draws on the FreeMarkets experience to provide lessons for vendors of online B2B e-commerce services, and buyers and sellers participating in online auction events.

The Emergence of FreeMarkets
Since 1995, FreeMarkets has created over 11,500 online auctions for over US$16.6bn worth of purchase orders. FreeMarkets estimates that its clients save between 2% and 25% on their purchases, with average savings across all categories of 15% in 2000. Total client savings since 1995 are estimated to be more than $3.2bn.
FreeMarkets has more than 110 clients (buyers), including United Technologies, General Motors, Alcoa, Royal Bank of Scotland, Emerson, Nestlé and Visteon. In many cases, FreeMarkets works to consolidate purchases across several divisions within the organisation to provide maximum leverage. More than 11,000 suppliers from over 55 countries have participated in FreeMarkets’ auctions.

**Example: Corrugated paper packaging**

To consolidate business among the most competitive, high-quality, service-oriented suppliers, a large global corporation placed its requirements for corrugated paper packaging up for bid through the FreeMarkets B2B e-marketplace. Purchases were aggregated across five facilities to create a more attractive bidding opportunity for suppliers.

Supply category: corrugated paper packaging
Historic cost: $3.9m
Buyer: five US locations of a global corporation
Suppliers: 14 US suppliers
Pricing format: downward auction
e-Sourcing solution: FreeMarkets FullSource™
Number of Bids: 115

**Benefits**
- Grouped request for quotations (RFQ) from five facilities
- Introduced new qualified suppliers
- Achieved 12% savings ($468,000) in a supply market operating at near capacity

The company's B2B e-marketplace handles direct materials (incorporated into end-products), indirect materials (used to support operations) and services in over 175 product and service categories. Examples include injection-moulded plastic parts, metal fabrications, chemicals, printed circuit boards, corrugated packaging, coal, capital equipment, and construction services.

FreeMarkets believes that a fair and efficient marketplace must cross borders. The company has established operations on four continents to provide local support to its customers in various regions and to help buyers and suppliers who wish to trade in these markets.

**The Buying Process**

FreeMarkets’ online auction process follows a series of steps. The company first works with the client to identify products and services that might be purchased through its B2B e-marketplace. Once an appropriate purchase has been identified, FreeMarkets begins the market-making process. The company helps the buyer prepare and distribute a detailed Request for Quotation (RFQ), identifies qualified global suppliers, and prepares suppliers to bid. Finally, FreeMarkets conducts a real-time, online auction through its B2B e-marketplace.

FreeMarkets’ e-sourcing solutions are customised to meet the goals of each e-market. Over 160 million possible combinations of bidding formats, display formats and other parameters are available. The following lists some of the possible formats:

- **Downward**: allows bids in decreasing increments
- **Upward**: allows bids in increasing increments
- **Index**: allows bidding above/below a published index
- **Multicurrency**: converts bids in different currencies to a single currency
- **Net present value**: converts different multi-year bids into one current value
- **Rank order**: allows bidders to see their ranks only, not all bids
- **Transformational**: converts different types of bids into one format

Although suppliers can see the bid prices on bid day, all supplier identities are kept confidential. The bidding event has a scheduled opening and closing time. As long as suppliers continue to place bids in a lot, the lot stays open. The lot closes when no new market-leading bids are submitted. An online auction bid history graph is shown at Figure 1.

Because price is not the only factor, clients do not normally make award decisions on bid day. In the days and weeks that follow the bidding event, buyers examine bid results, review supplier information (such as supplier capability, quality certifications, and

Business Strategy Review
manufacturing processes), and sometimes conduct a buyer audit before making a final decision. The client does not have to select the lowest bidder, and may well stay with an existing supplier who is price competitive but may not have submitted the lowest price.

Recently, FreeMarkets has started to license use of its software for auctions hosted by the purchasing departments, business units or divisions of individual companies. Under a three-year agreement announced in February 2001, United Technologies Corporation (UTC), a global provider of high technology products and support services to the building systems and aerospace industries, became the first company to license FreeMarket’s Quicksource™ auction software. UTC will not use FreeMarket’s consultancy or market-making services, but will run its own auctions using Quicksource™. Buyer-driven marketplaces operate from the buyer’s desktop, branded with the client organisation’s look and feel, and are able to support a range of sourcing needs. The service gives organisations the ability to create their own e-markets, hosted and supported by FreeMarkets.

Another service provided by FreeMarkets is asset recovery for surplus assets through its online Asset Exchange. This represents only a small share of total revenue.

**Figure 1**

**FreeMarkets Bid History Graph: Microprocessor Auction**

<table>
<thead>
<tr>
<th>FreeMarkets at a Glance</th>
<th>June 2001</th>
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</thead>
<tbody>
<tr>
<td>• Founded 1995</td>
<td></td>
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<tr>
<td>• $16.6bn traded volume</td>
<td></td>
</tr>
<tr>
<td>• $3.2bn savings generated</td>
<td></td>
</tr>
<tr>
<td>• 15% average saving for customers</td>
<td></td>
</tr>
<tr>
<td>• Over 9,300 online markets hosted</td>
<td></td>
</tr>
<tr>
<td>• Over 150,000 suppliers</td>
<td></td>
</tr>
<tr>
<td>• 100 clients (buying companies)</td>
<td></td>
</tr>
<tr>
<td>• Over 165 categories</td>
<td></td>
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<tr>
<td>• Nearly 1,000 employees</td>
<td></td>
</tr>
<tr>
<td>• Over 30 languages</td>
<td></td>
</tr>
<tr>
<td>• Initial Public Offering: December 10, 1999</td>
<td></td>
</tr>
<tr>
<td>• IPO Price per Share: $48</td>
<td></td>
</tr>
<tr>
<td>• Price Per Share June 2001: $16</td>
<td></td>
</tr>
</tbody>
</table>
The FreeMarkets Value Proposition
FreeMarkets believes that its B2B e-Marketplace delivers the following:

Independence: FreeMarkets argues that only an independent e-marketplace can provide a truly level playing field. The FreeMarkets B2B e-marketplace is fully independent and neutral. FreeMarkets does not promote the interest of any buying or selling organisation.

Market efficiency: The company also asserts that an efficient market will bring the right buyers and sellers together, facilitate transactions, and create a win-win process that encourages even greater participation.

Volume: FreeMarkets sees volume as an important metric for any marketplace. Volume is seen to drive both performance and efficiency.

Integration: The company believes that an e-market solution has to be flexible enough to integrate with other technology solutions but powerful enough to stand alone. FreeMarkets has designed its sourcing software to work as seamlessly as possible with a range of e-commerce solutions.

Measurable ROI: FreeMarkets aims to deliver fast, measurable results in the form of procurement savings, reductions in project cycle times and administration costs.

Figure 2
Savings and fees
(a) A US based diversified manufacturer

(b) Consumer electronics manufacturer: savings by product
Example: Printed Circuit Boards
A global diversified manufacturing firm faced the difficult challenge of consolidating millions of dollars of printed circuit board (PCB) purchases across 14 global divisions. The company wanted to consolidate its supply base and standardise data to understand future buying patterns.

Supply category: printed circuit boards
Historic cost: $36.1m
Buyer: global diversified manufacturer
Suppliers: 43 ISO9000 certified suppliers
Pricing format: downward auction
Sourcing solution: FreeMarkets’ FullSource™
Number of bids: 755

Benefits
- Obtained buy-in from 14 divisions to participate in a corporate-wide event. Standardised data on over 1,000 PCB designs across 19 divisions
- Introduced several qualified suppliers from Asian countries
- Consolidated supply base from 58 to 9
- Ultimate saving around $10m

Global reach: Finally, the company believes that an efficient marketplace has to be global. Buyers and suppliers from over 55 countries have participated in the FreeMarkets B2B e-marketplace, supported by FreeMarkets’ 19 offices in 13 countries across Asia, Europe and the Americas.

In addition, Freemarkets argues that its clients benefit from the depth of information it provides about both auctions and suppliers, and from the competition introduced by bringing in new suppliers from around the world. On the supply side, sellers can gain access to a global scale, as well as from the cost savings generated by free registration and participation, detailed standardised RFQs, and a much faster bidding process.

Figure 2 compares the cumulative savings and fees for a diversified manufacturer and the commodity savings for a consumer electronics manufacturer.

To participate in a FreeMarkets’ online market, suppliers must provide a detailed capability profile, review the RFQ, prepare a bidding strategy, and complete FreeMarkets’ BidWare® training.

Revenue Model
FreeMarkets generates revenue from its service agreements with clients (buyers). These typically provide for fixed monthly fees (eg $75,000 – $100,000 per month for the two-three months of a project life cycle) performance incentive payments based on volume, savings or both, and sales commissions. The company expects incentive payments to become its main revenue source in the long term.

Monthly fees received by the company are for the use of technologies, supplier and supply market information, market making and market operations staff, and facilities. Negotiated monthly fees vary by client, and reflect both the anticipated auction volume and the staffing, expertise and technology that FreeMarkets expects to commit to provide the services requested.

Revenue from the licensing and support of the Quicksource™ auction software is expected to grow substantially in the medium to long-term, as other companies follow United Technologies.

FreeMarkets’ agreements can provide for sales commissions to be paid by suppliers. But this approach has been strongly resisted by the company’s supplier base. Most of the service agreements signed by FreeMarkets since early 1999 have not included

Table 1

<table>
<thead>
<tr>
<th>Calendar years, $m</th>
<th>2000</th>
<th>1999</th>
<th>1998</th>
<th>1997</th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>83.3</td>
<td>20.9</td>
<td>7.8</td>
<td>1.7</td>
<td>0.4</td>
</tr>
<tr>
<td>Direct costs</td>
<td>(48.9)</td>
<td>(12.2)</td>
<td>(4.3)</td>
<td>(1.1)</td>
<td>(0.5)</td>
</tr>
<tr>
<td></td>
<td>34.4</td>
<td>8.7</td>
<td>3.5</td>
<td>0.6</td>
<td>(0.1)</td>
</tr>
<tr>
<td>Indirect costs</td>
<td>(101.1)</td>
<td>(31.4)</td>
<td>(3.5)</td>
<td>(1.7)</td>
<td>(1.3)</td>
</tr>
<tr>
<td>Operating loss*</td>
<td>(66.7)</td>
<td>(22.7)</td>
<td>0</td>
<td>(1.1)</td>
<td>(1.4)</td>
</tr>
</tbody>
</table>

*Excluding goodwill amortization, interest and other income
supplier-paid commissions, and the company expects to eventually abandon this approach altogether.

**Financial Performance**

FreeMarkets is still not profitable (Table 1) and its share price collapsed along with those of other dot.coms last year (Figure 3). However, on release of its first quarter results for 2001, it declared that it expected to break even by the first quarter of 2002. In the words of FreeMarkets’ Chairman and CEO, Glen Meakem:

“We look forward to building on the momentum we have gained to extend our global leadership position even further in the months ahead...Although demand for e-sourcing solutions softened during the quarter due to the weakening economy, our customers continued to leverage our technologies, market information and services to generate savings and efficiencies for their organizations...”

Table 2 shows figures for the first quarter of 2001. FreeMarkets Senior Vice President and Chief Financial Officer Joan Hooper said:

“We are pleased with our bottom-line performance for the first quarter. While our revenues fell slightly short of our expectations due to longer sales cycles driven by a softening economy, we are very encouraged by the deals we signed late in the quarter, which should enable us to achieve sequential revenue growth of 10% to 15% in the second quarter.”

**The Future**

In mid-2001, FreeMarkets is positioning itself to remain the premier global provider of online purchasing and procurement.

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**Table 2**

<table>
<thead>
<tr>
<th></th>
<th>1Q01</th>
<th>Previous qtr</th>
<th>1Q00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue ($m)</td>
<td>33.0</td>
<td>34.5 (-4.3%)</td>
<td>10.8 (+205%)</td>
</tr>
<tr>
<td>Volume ($bn)</td>
<td>2.6</td>
<td>3.5 (-43%)</td>
<td>1.3 (+92%)</td>
</tr>
<tr>
<td>Gross margin</td>
<td>51%</td>
<td>50%</td>
<td>41%</td>
</tr>
<tr>
<td>Net loss ($m)*</td>
<td>9.3</td>
<td>10.4</td>
<td></td>
</tr>
<tr>
<td>Net loss per share ($)*</td>
<td>0.24</td>
<td>0.27</td>
<td></td>
</tr>
</tbody>
</table>

*Excluding stock based expense and non-cash acquisition costs
According to Glen Meakem, Chairman and CEO

“Demand for sourcing solutions that deliver large and immediate returns on investment is extremely strong, and FreeMarkets is uniquely positioned to capitalise on this market opportunity... Our portfolio of sourcing solutions provides professional buyers with the technology, information and services they need to make better business decisions.”

According to Ed Smith, Director of Group Purchasing Operations at London-based Royal Bank group, and a FreeMarkets client:

“We see a strong future for FreeMarkets. Royal Bank has 99 different integration activities to complete by the end of 2001, and the FreeMarkets auction process helps us manage our time more effectively. True market price is another benefit. Prices are not based on historic data but what the market will bear, coupled with the element of cost breakdown from bids so we are able to check how robust bids are before awarding. FreeMarkets also does a lot of work to ensure supplier integrity. At the moment we just have a ‘toe in water’, £60 - £70m worth of work through FreeMarkets in the next 12 months, but our total spend is well over £2bn per year.”

FreeMarkets intends to expand its client base in 2001-2 to include additional global corporations, government agencies and medium-sized companies from around the world, supported by additional international offices. FreeMarkets also plans to continue to expand its e-marketplace to include more direct and indirect materials and services, where its online auctions and other services can provide significant savings for clients.

**Examples: Online Markets for Services**

- **Tax preparation services:** A major client identified savings of close to 50% on a contract for tax preparation services
- **Telecommunications services:** More than $4m worth of telecoms services – including fixed and mobile service in Italy, wiring and hardware installation – have been bid through the FreeMarkets online auction marketplace, saving over 30%.
- **Security guard services:** FreeMarkets helped a global 1000 client save more than 14% on a contract for security guard services.
- **Transportation:** Contracts for more than $31m worth of transportation, including less-than-truckload transportation and ocean freight, have been bid through the FreeMarkets online auction marketplace.
- **Relocation services:** FreeMarkets has bid out over $93m worth of relocation services and identified annual savings of more than 20%
- **Hotel services:** A major client saved more than 20% off contract hotel-room rates.
- **Office furniture and installation:** Office furniture and installation services worth nearly $9m have been purchased through the FreeMarkets online auction marketplace. Average savings on these purchases exceeded 31%.

FreeMarkets and Online Auctions 65

**Online Auctions: Lessons for Vendors, Buyers and Sellers**

FreeMarkets believes that its B2B e-marketplace benefits all participants. It enables buyers to find qualified suppliers, quality goods and services. It also enables competitive pricing. Suppliers have better access to new customers. Transactions flow freely in a secure, transparent environment with fair and equal access for all. The company’s e-marketplace is independent and neutral, and does not promote the interest of any buying or selling organisation. It brings buyers and sellers together, and facilitates frictionless transactions. Unlike B2B exchanges, it does not involve huge upfront investment in terms of capital, organisation or time.

**Lessons for vendors**

For other vendors of B2B solutions, the FreeMarkets story provides a number of lessons. First, any online B2B e-commerce offering must obviously provide a clear value proposition to customers over existing business processes, and provide clear savings and/or efficiencies in project cycle time and total transaction costs.

Technology for the e-marketplace must be easy to implement, the most attractive solutions for both customers and suppliers being those which minimise the changes an enterprise must make when it does
business online. But technology is not the key here, as software solutions for in-house auctions are becoming readily available. Elements such as the market-making expertise surrounding the technology, breadth of supplier base, and the ability of vendors to confirm the integrity of geographically-dispersed suppliers are what buyers are willing to pay for. And this is another lesson from FreeMarkets – buyers will pay if the benefits are clear.

Experience has shown that business models based on advertising revenue or supplier commissions to support B2B exchanges or industry-specific e-commerce sites are usually unsustainable. Despite this, a recent review of leading B2B online marketplaces revealed that only two out of 23 vendors levied substantial fees on buyers (Kerrigan et al 2001). The FreeMarkets case suggests that vendors should develop a fee structure that is closely linked to the value-added provided to their clients, and this might certainly mean basing a portion of fees on project outcomes.

Another important metric is critical mass of both buyers and suppliers, with transaction fees depending on the number and scope of auctions hosted. With more than 110 buyers and 11,000 suppliers from over 55 countries, FreeMarkets has emerged as one of the strongest e-marketplaces in terms of active members.

FreeMarkets’s experience with its QuickTrade solution also shows that vendors can make money by providing proprietary auction software and support to large customers.

One aspect that FreeMarkets and other online auction providers need to address should they wish to provide a full spectrum of procurement services is relationship management. Vendors in the e-marketplace need to develop non-auction or tailored auction offerings to facilitate transactions where established buyer-supplier relationships are important in negotiating long-term contracts, volume pricing agreements or collaborative product development.

While FreeMarkets is not yet profitable, it is likely to be one of the few B2B e-marketplace start-ups (that does not have a major industry sponsor) to survive the current round of online marketplace consolidation. In mid-2001, FreeMarkets is still recruiting amidst significant downsizing by other technology companies.

FreeMarkets’ future success will depend upon its ability to continue to build its global customer and supplier base and to provide sustained value-added. The company’s combination of transaction, licensing and professional service fees provides an attractive example for B2B marketplaces struggling to devise sustainable revenue models.

**Lessons for buyers**

FreeMarkets and other online auction providers claim that the primary benefit for buyers is the cost and time savings they realise by creating a frictionless and transparent market. This benefit is coupled with secondary benefits of access to a global supplier network and extensive market data including information on suppliers’ manufacturing processes, quality assurance practice, market focus, and facilities. But, while online auctions such as FreeMarkets offer many benefits for buyers, there are also constraints.

While the auction approach may certainly work for commodity products such as paper, office products or microchips, there might be dangers if buyers expect to be able to apply this model to more critical or complex direct inputs.

Even if an online auction company provides extensive vetting and pre-qualification of suppliers, do buyers really benefit by changing suppliers for every product run or project? Indeed, the internet-based auction model seems to go against the strategic partnership approach that many companies have adopted as they have outsourced extensive parts of their value chains.

FreeMarkets and other online auction providers have discovered that buyers who move to a lower cost bidder often return to existing (and higher cost) suppliers after experiencing realignment challenges. It is notable that leading new economy companies such as Cisco and Dell have avoided subjecting their suppliers to this kind of competition, being more concerned to maintain strong and dependable relationships than to squeeze their suppliers to the line on each transaction. It is in no-one’s best interests to force your suppliers out of business by applying hyper-competition.

Important strategic considerations include:

- Can this product/service be readily sourced from multiple suppliers?

- What are the potential or hidden costs of changing my existing supplier?
Are supplier transfer costs acceptable?

What are the risks associated with alienating core suppliers?

Before entering the online auction space, buyers should first assess whether an e-marketplace is the best option for the purchases they expect to make, compared to other methods on or off the Internet.

Lessons for suppliers

There are also lessons for sellers. In situations where suppliers are drawn into an auction by an existing customer, they should recognise that they often do not have to provide the lowest price to extend previous contracts. Price is certainly important, but issues relating to dependability, quality and established relationships can often result in an existing supplier who is competitive but not the cheapest bidder winning the final tender. As mentioned above, and with the possible exception of commodity-type products and services, a buyer is unlikely to change supplier for every procurement project.

Although online auctions might be applicable for interchangeable commodities, this is not always the case for more complex products and services. Among those who will experience far less pressure to participate in online auctions are: suppliers with unique or specialised products that do not lend themselves to direct comparison; those with products that are not susceptible to substitution (due to a limited supplier base); those with significant patent or copyright protection; and suppliers with hybrid product and service offerings.

In situations where there are a limited number of suppliers providing highly customised products or services, sellers should be in a strong position. But in the absence of a reasoned strategy, costly mistakes are possible. In one case, a large organisation invited the only three qualified suppliers of a critical component to participate in an online auction, making a 28% saving over historic cost. The suppliers to their auction have now set a much lower price for their products, creating a dangerous precedent for their industry. A wiser strategy would have been for all of the suppliers to refuse to participate – not through collusion but through a shared desire to retain healthy profits in a unique market where they have a significant amount of bargaining power.
More and more companies are refusing to participate in auctions, particularly in fragmented industries with multiple buyers who possess a relatively weak bargaining position. Important strategic considerations for suppliers include:

- What is the competitive situation in my industry?
- What is the relative bargaining power of buyers/suppliers?
- Which competing sellers are likely to be involved in the auction?
- Does the auction provide an opportunity for suppliers to differentiate their products/services?
- How have auctions affected suppliers’ prices in this industry to date?

A final lesson for sellers relates to cost and acceptable profit margin as the auction process provides an easy outlet for an undisciplined bidder to lose his or her shirt. Sellers should enter an online auction process with a pre-determined strategy, and a definite withdrawal point. It is not unknown for emotion to get the better of reason (particularly if the CEO is present for the auction event) and for a company to bid itself below break-even. Unscrupulous bidders who do not intend to pursue a tender might drive down the bid price early and then withdraw, using the auction process as a competitive tool against other suppliers.

Conclusion

Online auctions will increase over the coming years. They remove much of the friction surrounding the traditional tendering process, offer the potential advantages of wider breadth of suppliers, and can provide an effective solution for buyers to establish true market prices for their inputs. For suppliers, e-marketplaces can provide access to previously unattainable accounts and unprecedented participation in global markets. And unlike other e-procurement solutions such as industry exchanges and B2B e-commerce portals, online auctions are relatively quick and easy to implement.

Despite these advantages, both buyers and sellers should also acknowledge that electronic B2B auctions have limitations. For buyers, online auctions are primarily a tactical tool to get the best price for commodity products and services from non-strategic suppliers. For sellers, auctions are a necessary evil in competitive markets involving high levels of commoditization and/or consolidation amongst buyers, but should be approached cautiously in industries where suppliers are few.

The shakeout in B2B e-marketplaces is likely to continue. Those vendors who survive will be those who, like FreeMarkets, can deliver a clear value proposition to clients and can support this value proposition with a sustainable path to profitability.

Reference