

Omnexus: The Plastics eMarketplace¹

Peter Dunning sat back in his chair; his desk neatly organized yet his mind piled high with issues and decisions to be made. It had been 3 months since he accepted the position of CEO of Omnexus, the plastics eMarketplace, on January 8, 2001.

March 2001 marked the one-year anniversary since the B2B portal's founding and many critical turning points lay just around the corner. Next week his Vice President of Strategy, Michael Thaler, was scheduled to make a presentation entitled "Developing a Successful Model for a Global e-Marketplace" at an e-Business conference in New York. The same week Omnexus planned to launch its European site, expanding beyond the U.S. for the first time.

For the past three months, Peter had worked closely with Yaarit Silverstone, the interim CEO from Accenture, who brought him up to speed on the evolution of the business model, key issues facing Omnexus and the strategic path that lay ahead. For Peter, this was not the first experience with an e-Marketplace or the chemical/plastics industry. As the former CEO of FacilityPro.com, an Internet startup in the commercial real estate industry, he had extensive experience in the hi-tech industry. Prior to FacilityPro.com, Peter was the Senior VP of Oracle handling the energy, chemical, automotive and hi-tech business units and also served as executive vice president with SAP America in global accounts for seven years. Omnexus required Peter's experience as they migrated from Internet startup to a leading global marketplace for the plastics industry.

The next six months would be crucial to the long-term success of Omnexus and many questions weighed heavily on Peter and his senior management team. Were they reaching their goals on customer acquisition and supplier integration? How could they make their revenue stream more robust? Should they expand vertically by offering a wider variety of resins or chemical products or should they add services horizontally to capture new market audiences outside of the injection and blow molding industry? Peter recognized the magnitude of these questions and realized there was a lot of work to be done.

Founding

"The explosion of eMarketplaces has created a crowded landscape within most industries," Forrester senior analyst Steven J. Kafka said. "Large firms are faced with a confusing set of options for participating in these venues: different ownership models, equity structures and product offerings. And, in this flurry of activity, firms must navigate through a free-for-all deal making environment."² According to Zona Research, a provider of analysis about leading Internet technologies, there were 840 marketplaces and 242 marketplace enablers divided into 72 industry categories in July 2000. By December 13, 2000, Zona updated its list by removing 36

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² Brady, Mike. "Analysts Fuzzy on B2B's Future". Ecommerce Times. March 3, 2001

failed exchanges and adding 189 marketplaces and 20 marketplace enablers, bringing the total to 1029 marketplaces and 262 enablers.

During the first quarter of 2000, as the B2B portal phenomenon garnered a majority of industry headlines, the large chemical companies began to take a closer look at their industry to decide whether the concept could provide the much-touted supply chain advantages in the specific industry segments they participated in. By late February, after several months of discussion amongst themselves, BASF, Bayer, Dow, Dupont and Ticona/Celanese agreed to establish a task force consisting of one project lead from each founding company to establish the business plan for presentation to the board of directors for approval. Duane Priddy, the Bayer AG liaison for, and now the VP of Marketing at, Omnexus, described the 6-week process as “intense and at times painstaking,” as the liaisons debated and negotiated what the marketplace should do and how it could do it.

On April 5, 2000, the five founding corporations signed a letter of intent committing to the creation of Omnexus, a neutral company to serve as a global eMarketplace for the plastics industry. The founders had identified the thermoplastic processing market, specifically tapping the global \$50 billion injection and blow molding industry as its initial target market. The creation of Omnexus, the founders believed, would allow for a branded marketplace with significant differentiating factors that would attract a high volume of suppliers and buyers to participate in the market, providing significant supply chain efficiencies and cost savings to both.

From mid-April to mid-May 2000, the Omnexus task force enlisted the services of McKinsey & Company, a global leader in management consulting to aid in constructing the original business case and model. The consortia, consisting of dominantly European companies, was very familiar with McKinsey’s reputation for top-level management consulting and comfortable with their European approach. McKinsey remained an integral part of the Omnexus team throughout the planning of the initial business model.

However, as the model evolved from the design stage to the implementation phase, the task force opted to go in a different direction, a rare step for a company in the early stages of its development. Knowing the importance that the partner would play in the initial success or failure in their project, Omnexus submitted an RFQ in mid-May 2000 and began reviewing proposals pitched by the world’s leading professional service firms. On June 20, 2000, Accenture, formerly Andersen Consulting, and Omnexus formed a strategic alliance to refine and implement the original business model drafted by McKinsey. In a company press release, Bill Ray, global director of e-business, Dow Plastics and Dow’s representative on the Omnexus Board of Directors, explained the change from McKinsey to Accenture,

“Andersen Consulting is a leader in understanding and executing e-commerce strategies. The firm’s knowledge of the industry and of e-commerce make them our choice for this strategic initiative.”

Duane Priddy, Bayer AG’s representative, concurred, “Accenture’s style and approach more than anything else won them the business.” Presenting a strong U.S. focused team, Omnexus was impressed by the diversity of ability and the past performance of the business models Accenture had worked on. Convinced they had their implementation partner soundly in place, Omnexus began moving forward rapidly to market.

June 20, 2000 proved to be a significant day in the very short history of Omnexus. To emphasize their belief in the project, the founders invested capital, both human and financial, and agreed to terms that stressed a commitment to driving customers through the site. The founding suppliers would receive half of their equity in direct shares of Omnexus. The other half of their equity would be received in the form of performance-based warrants, which would rise or fall depending on the amount of liquidity each founding-supplier drove through the site. Their combined initial investment of \$50 million was expected to drive the company through its formative stage with additional capital coming from the equity market in the future.

Coinciding with the announcement of the initial investment and the strategic alliance with Accenture, on June 20, 2000 Omnexus announced its strategic alliance with IBM to provide the technical platform and become the marketplace's integration partner. Fresh on the heels of its own announcement in March concerning the IBM-Ariba-i2 alliance for e-marketplace platform development, IBM immediately turned their attention towards the October 1, 2000 launch date announced earlier that same day by interim CEO, Yaarit Silverstone of Accenture, at the National Plastics Expo in Chicago.

Subsequently, Accenture began placing top-level executives, namely firm partners, with extensive industry and technical experience, in senior management positions. Yaarit Silverstone, Accenture partner, was named interim-CEO and Stan Vlasimsky, also an Accenture partner, took the role of COO. Immediately, the management team in conjunction with the Omnexus task force began reshaping the original business plan and redefining goals, target markets, site design and functionality. Staffed primarily with Accenture consultants, prototype construction and implementation planning began soon thereafter. As plans to go live were quickly visible on the horizon, the search began for full-time Omnexus employees.

Launching the Marketplace

On October 2, 2000, Omnexus launched the initial version of the marketplace and allowed buyers and suppliers to apply for membership and browse the product catalog. On November 30, 2000, Omnexus completed its first live transaction when an injection blow molder purchased \$40,000 worth of resin product from Dow Chemical. In December 2000, Omnexus completed its first multi-supplier transaction, when a large plastics processor transacted simultaneously with Dow Chemical and Ticona/Celanese in "real time" for their respective products, at prices, credit terms and delivery schedules unique to each relationship.

Omnexus was also busy selecting and entering strategic alliances to further enhance its product and service offerings and place them in a position to expand internationally. On November 17, 2000, Omnexus entered a strategic alliance with ChemCross, the leading Asian B2B e-marketplace for chemicals and plastics. This alliance enabled both companies to extend their reach globally. ChemCross provided expertise, networked relationships and a strong customer base in the Asian market, while Omnexus provided similar access to the U.S. for ChemCross.

On December 7, 2000, Omnexus formed an alliance with Conferos (formerly BuyPlastics.com). The alliance allowed Omnexus customers to access Conferos tools for collaborative design and industry content. The alliance was also expected to enable CONFEROS' customers to centralize their purchasing of plastics and hardgoods through Omnexus' e-marketplace.

The Plastics Industry: Segmentation Strategy

According to the Society of the Plastics industry, the plastics industry is one of the largest manufacturing industries in the world, accounting for approximately \$589 billion dollars in annual volume, directly employing more than 1.5 million people. Plastics are used in so many products, and so many industries, that the industry is essentially as vertical as it is horizontal. Plastics penetrate market boundaries, ranging from packaging and building/construction to transportation; consumer and institutional products; furniture and furnishings; electrical/electronic components; adhesives, inks and coatings and others.³

Process Method Segmentation

The plastics industry can be segmented into processing methods including: injection molding, blow molding, thermoforming, transfer molding, reaction injection molding, compression molding and extrusion. Omnexus had to evaluate these industry segments in order to determine an entry strategy that addressed all or specific segments of the industry.

Omnexus selected the Injection and Blow Molding industry as the initial target market. This market segment generates \$50 billion in sales, \$40 billion in polymers and \$10 billion in equipment, MRO, etc., out of the total \$589 billion for the plastics industry. Industry analysts at the Freedonia Group⁴ estimated that the global injection and blow molding market was growing at a rate of 5% per year. Additionally, industry economic indicators pointed in a favorable direction for the injection molding industry. According to the Molders Economic Index,

“The basic economic conditions are excellent for injection molding, which is among the top manufacturing industries in terms of recent growth. Injection molding has been part of an enormous growth curve. U.S. industrial production since 1992 has gained nearly 45 percent. By contrast, Japan gained 7 percent; Germany, 14 percent; and Great Britain, 15 percent, according to data from the National Assn. of Manufacturers. The United States is also the productivity leader: In the 1992 to 1998 period, Japan's productivity rose 20 percent; Germany's gained 27 percent; and the United States' rose 28 percent.”⁵

Inputs for the injection and blow molding industry mainly consist of resins, equipment, material, repair and operations (MRO), tooling and other supplies. Analysis of global resin activity indicates that sales are rather evenly distributed among three regions: \$16 billion for North America, \$10 billion for Europe, and \$14 billion for Asia. While the \$40 billion dollar injection and blow molding polymer market is a very small piece of the \$1.6 trillion global chemical market, Omnexus felt that the resin purchasing process would win big initially on the site by providing buyers greater efficiencies and cost savings, creating a large installed base of users. (See Figure 1)

Omnexus' top management believed that the injection and blow molding business was well-suited for a migration to e-commerce because it was characterized by: a concentrated group of suppliers and a fragmented group of buyers, an inefficient buying process with high data requirements, and large transaction volumes. Factors contributing to this situation include the widespread use of plastics across all industries, varying performance requirements, and the

³ www.socplas.org/industry/index.htm

⁴ Society of Plastics Industry 2000, SRI, Freedonia, Global Information Inc

⁵ Von Hassell. Argostino, Molder's Economic Index. IMM. December 2000

proliferation of injection and blow molding businesses. Several measures of the injection and blow molding market’s propensity to accept e-commerce came from a Jupiter/Merrill Lynch study and a McKinsey report, predicting by 2005, 50% to 80% of total resin transactions would take place electronically.

Customer Segmentation

Omnexus segmented the injection and blow molding industry into 4 different customer types: molders, Original Equipment Manufacturer (OEM), compounders and distributors (See Table 1). Of the four customer types identified, Omnexus has specifically targeted the molders primarily because they purchase the majority of the resins used in the injection molding business. While marketing and sales efforts do not specifically target the other three customer types, Omnexus does allow compounders, distributors and OEMs to participate in the marketplace if they feel it will provide them the service and advantages they want or need.

According to the Freedonia report, there were approximately 8,000 molders in the United States, Canada, and Mexico. Of those 8000, 2.5%, or about 200 molders, accounted for half of the molded product sales, and these injection and blow molding companies were primarily based in the United States with annual revenues of at least \$30 million each per year. Another 2700 molders were categorized as medium-sized, with annual revenues of \$6 million each. This group of large and medium-sized molders, roughly 3000 in number, were the Omnexus target customers and accounted for over 80% of molding activity in North America. The remaining 5,000 molders had annual revenues under \$1 million each. Omnexus did not actively target this set of customers, however, if they independently registered they were welcome to use the Omnexus service offering (See Figure 2).

Table 1: Segmentation of Resin Buyers

<i>Customer</i>	<i>Characteristics</i>
<i>Molder</i>	<ul style="list-style-type: none"> • Purchase the majority of resins used • Specification-driven – manufacture parts in conjunction with OEM specifications. • Independent – common products. Bid for contract work. Negotiate own prices
<i>OEM</i>	<ul style="list-style-type: none"> • Long-term contracts with suppliers • In-house molding • Mold about 10% of resins they purchase
<i>Compounders</i>	<ul style="list-style-type: none"> • Produce highly customized/complex resin compounds • Typically sell compounded resins to molders or OEMs
<i>Distributors</i>	<ul style="list-style-type: none"> • Serve small to medium sized customers. • One-stop shop

Source: Omnexus

e-Intermediary Competition

With the advent of e-commerce solutions and Internet enabled technology, there are interesting competitive dynamics taking place in every industry. Traditional rivals are blurring with new offerings and the recognition of one’s competition has become more and more complex. The

competition in the thermoplastic resin industry is multifaceted and can be broken down into several general categories: suppliers, distributors, marketplaces, procurement specialists, solution sellers and direct sales forces (See Table 2).

Table 2: e-Intermediary Competition

<i>Type</i>	<i>Characteristics</i>	<i>Examples</i>
<i>Supplier/Distributor Online</i>	<ul style="list-style-type: none"> • Catalog oriented • Purchasing, customer service & tracking • Integrated to supplier operations 	<ul style="list-style-type: none"> • Dow – MyAccount@Dow • BASF – Plastics Portal • Bayer – BayerONE
<i>Marketplaces</i>	<ul style="list-style-type: none"> • Neutral (Independent or consortia) • Single-connection procurement • Broad range of product 	<ul style="list-style-type: none"> • Commerx, GetPlastics, PlasticsGrid, 20ton.com, CheMatch
<i>Solution Sellers</i>	<ul style="list-style-type: none"> • E-commerce solutions • EBPP, logistics & document handling 	<ul style="list-style-type: none"> • Commerx • Envera
<i>Procurement Specialists</i>	<ul style="list-style-type: none"> • Analyze spend • Negotiate best pricing • Qualify suppliers 	<ul style="list-style-type: none"> • FreeMarkets, • ICG Commerce
<i>Direct Selling - Offline</i>	<ul style="list-style-type: none"> • Established • Strong relationships • Personal 	<ul style="list-style-type: none"> • All resin suppliers using Omnexus' services • Direct sales-force

Source: Omnexus

Online Marketplaces

Direct threats during Omnexus' infancy stage were competing online marketplaces with value propositions and product offerings that may be perceived as similar. These include:

- **GetPlastics** - Founded in 1999, getPlastic delivered full service eCommerce solutions and engineering-centric decision support resources to the highly fragmented global plastics industry. Focused on the high-end, engineering resins and custom compound businesses, getPlastic provided a unique, proprietary business process efficiency platform aptly named RESINATE™. getPlastic customers can purchase high-performance off-the-shelf resins, custom compounds manufactured to specification, and commodity-based materials and compounds sourced through a global network of major resin manufacturers and compounders.⁶
- **PlasticsGrid** - The company was founded in early 2000 by the former CEO of GE Plastics Europe and the former CEO of Polymerland Europe. Plasticsgrid provides hosted e-procurement solutions for plastics processors. The site offers online purchasing, forward and reverse auction functionality, marketplace functions and ERP integration capabilities.⁷

⁶ www.getplastic.com

⁷ www.plasticsgrid.com

- **20tons.com** – 20tons.com is a marketplace for secondary plastics. Secondary plastics are those products that do not meet common product specifications.⁸
- **CheMatch** - CheMatch.com is a global Internet exchange and information resource for buying and selling bulk commodity chemicals, polymers and fuel products. In addition to exchange capability, CheMatch.com offers online auctions, reverse auctions and tenders.⁹

Future Competitive Threats

The Omnexus management team faced additional threats from indirect competitors as the business model evolved and new products and services were added. Included are procurement specialists, such as, FreeMarkets and ICG Commerce and solution sellers, such as Commerx and Envera. While not directly providing the same services, the existence of such competition directly impacted key strategic decisions that management would face in the near future.

- **Freemarkets.com** - Freemarkets created online markets in the B2B Global Marketplace for industrial parts, raw materials, commodities, and services. The FreeMarkets B2B Global Marketplace combined the following four elements to provide a total sourcing solution: marketplace technology, market operations, market making services and market information.¹⁰
- **ICG Commerce** - ICG Commerce combined supply-chain expertise with advanced Internet technology and dedicated services to deliver e-procurement solutions using a variety of Internet-based technologies for spot buys, aggregated buys, forward/reverse auctions, e-catalogs, eRFQs/eRFPs, and exchanges.¹¹
- **Commerx** - Commerx is a leading provider and operator of business process automation solutions that allowed customers the flexibility to integrate with existing business applications or to utilize one or more components of the suite to create a total solution for a particular business process.¹⁰
- **Envera** - Envera was a member-driven, eBusiness for Business service accelerating speed and efficiency for Web-enabled transactions and related supply chain services for the petroleum and chemical industries.¹²

Business Model

In June 2000, Accenture and Omnexus sought to create an online marketplace that addressed the inefficiencies existing in the plastics industry supply chain. Ms. Silverstone and the rest of the management team grappled with key issues in creating viable value propositions for both the buyers and suppliers. On the supply side, serious strategic issues faced companies contemplating joining Omnexus. According to Yaarit,

“Previously, the theory was that the more customers that you serve directly the more value there is in that relationship. Now, the theory has shifted to a hybrid where suppliers feel they should only directly service about 50% and find alternative channels to drive the others through in order to cut

⁸ www.20tons.com

⁹ www.chematch.com

¹⁰ www.freemarkets.com

¹¹ www.icgcommerce.com

¹² www.envera.com

out the cost and drive up the value. Two months ago nobody was thinking this way in his or her strategic sessions.”

Supplier organizations had been marketing and selling their products in distinct ways for decades. Participation in the marketplace would result in greater price transparency, which could result in customer retention complications. More importantly, suppliers would have to concede some control or at least perceived control.

Supply-Side Value Proposition

Recognizing the implications of change management and channel conflict, Omnexus made it a top priority to address the concerns of supplier organizations. For example, changes to the existing sales channel, Omnexus recognized, would have the greatest impact on the supplier sales forces. The suppliers who migrated to and invested in Omnexus still carried a sales force to generate leads, new business and manage existing relationships. Embracing these sales organizations as their key to customer acquisition, Omnexus obtained written commitments from each supplier that the salespersons retained ownership of accounts that moved through Omnexus, and that the commission structure and other compensation plans remained unchanged.

Mike Thaler, vice-president of Strategy, addressed the issue of the existing sales channel and the perceived threat as a dis-intermediary in the sales channel:

“Omnexus is the only model that I know of in the form of an independent e-Marketplace that not only doesn’t seek to disinter mediate the supplier sales-force, but seeks to recruit them, automate their lives to a certain extent, and basically capture their capacity as a sales force for the benefit of Omnexus, the suppliers they work for, themselves and their customers.”

The change-management issues are very prominent for Omnexus. The online marketplace was a disrupting technology that would impact the entire organization, but specifically influence the traditional sales channel. While Omnexus recognized the impact their model would bring, it believed the marketplace will have positive, rather than negative, effects on their suppliers’ sales organizations. Mr. Thaler stated:

“Omnexus’ biggest challenge is to communicate and demonstrate how our services will benefit sales persons and get their “buy-in”. By diverting customers to the e-marketplace, Omnexus will take care of all of the paperwork, processing and customer service that many studies conclude take up 50% of a salespersons ‘day. This will allow them to concentrate on selling, relationship building, and providing high value-added expertise to their customers.”

In order to attract a wide variety of global suppliers, Omnexus built their model to achieve several supply-side benefits such as:

- Full integration with the Omnexus marketplace
- Increased transaction speed
- Deeper penetration into the injection/blow molding market
- Key cost reductions in customer acquisition and retention
- Automation of the demand chain
- Real-time inventory and price updating
- Alternative purchasing experience for new and old customers

Buy-side Value Proposition

On the buy-side, Omnexus faced an equally tough task. By changing age-old purchasing processes, the buyer could see their existing relationships with suppliers change. Trust was the key element in the strength of these relationships. Buyers could depend on their suppliers to deliver the product they needed, when they needed it. Omnexus recognized the importance of completing transactions correctly each and every time in order to build trust with the buyers. Therefore, Omnexus worked with IBM Global Services to ensure that the order management, data integrity and security components of the platform functioned at the optimum level before launch.

In its value proposition to buyers, Omnexus executives also believed that the upside of the marketplace could overcome any hesitations resin buyers might have. The thermoplastic resin industry consisted of a concentrated supplier base and a fragmented buyer base often resulting in a time consuming and labor-intensive purchasing process.

Omnexus provided single-point access to multiple suppliers increasing buyer capabilities for multi-sourcing while decreasing related search and administrative costs. Omnexus achieves efficiencies by allowing buyers to:

- Streamline purchasing process
- Use a physical properties-based search tool to enable retrieval of chemical compound profiles
- Submit Request For Quotes (RFQs) to various suppliers
- Outsource order facilitation and management
- Use electronic bill presentment and payment tools

Products and Services

The initial Omnexus offering (See figure 3), consists of four categories of functionality:

- **Portal**

With access granted through a secure logon-ID, users, both buyers and suppliers would be able to gain access to information regarding Omnexus and to the core functionalities of the portal. All buyers were required to meet standards set by Omnexus on credit worthiness. All customers were required to register as members of the marketplace in order to utilize marketplace services.

- **Source**

Enabled customers to search resins with various attributes from suppliers' catalogs who were participating on the site. This catalog service was sourced through M-Base and used Computer Aided Material Preselection by Uniform Standards (CAMPUS) database software. By May 2001, more than 50 plastics producers used this information system to distribute free product information to customers. In addition, buyers were able to submit RFQ's to selected suppliers for spot purchase intentions. Buyers were able to input detailed information such as SKU #'s, quantity, fulfillment requirements and price to make the process effective and efficient.

- **Order**

Built using the Ariba marketplace solution, the customer would have access to supplier catalogs and Omnexus product requisition and ordering capability. Customers could place orders online passing through Omnexus to the supplier.

- **Settle**

Omnexus settlement was powered by Billing Zone's B2B settlement engine, in affiliation with a group of five global banks: Mellon, Bank One, Wachovia, Chase, and Bank of America. The Electronic Bill Presentment and Payment web architecture housed supplier invoices and provided buyers the capability to review and select invoices for payment via ACH. The system allowed suppliers to track days of sales outstanding as well as other receivables. Buyers and suppliers could monitor cash flow, both in and out. This offering allowed buyers to maximize the benefits of ACH payments such as discount contracts by ensuring on-time payment.

Revenue Model

As of May 2001, the main revenue stream for Omnexus is through transaction fees. These transaction fees vary with the size of the orders and were charged to the supplier. For medium to large orders (greater than \$3000) suppliers were charged \$97 - \$120, and for small orders (less than \$3000) they were charged \$40 - \$80. Suppliers achieved the lower ends of the price range by driving significant volume through the marketplace and receiving volume discounts. Omnexus had opted not to charge subscription fees to participating buyers.

Sales & Marketing

Sales and marketing was divided into two separate divisions. Contrasting approaches to the two similar functions were the cause for the split. Duane Priddy explained,

“Right now the organization is divided, actually marketing is separate from sales as a function because we are taking a global approach at our marketing efforts and sales is very much regionally focused towards customers and the specific needs of those customers.”

With Omnexus' launch in Europe in March, 2001 and Asia in 2H2002, a global marketing approach allowed for a united front and greater control over the global message. The suppliers Omnexus had contracted with were global corporations that maintained a global strategic focus. However, the global focus was complemented with local sensitivity. For example, sales for resins could be segmented regionally, requiring much more of a local approach to establishing relationships with various molders. The sales division had two dedicated teams, customer-focused and supplier-focused. The customer-focused team segmented potential buyers by organizational size, large, medium and small. The large and medium sized processors were actively targeted and approached by the regional sales teams. Omnexus did not exclude the small processors and will facilitate their requests for integration if they approached the marketplace.

Supplier acquisition was approached in a slightly different manner. In order to meet liquidity targets, Omnexus felt it would need to attract a widely diverse supplier base that was capable of providing 80% of the purchasing needs in the injection and blow molding community. Additionally, a broad supplier base would help Omnexus reinforce its neutral position within the industry.

Omnexus aggressively implemented its supplier acquisition strategy, spending the majority of 2000 seeking additional suppliers to join the marketplace as Leadership Suppliers, where equity investments were required to ensure the continued success and growth of the business model. The equity investment was on a smaller scale compared to the founders' investment; however, Omnexus prioritized this process in order to instill a deeper public persona of neutrality. By the end of March 2001, Omnexus received funding from nine additional suppliers and distributors, beyond the five who founded Omnexus. These suppliers included: PolyOne (06/00), Solvay (06/00), DSM Engineering Plastics (08/00), Resinex & Ravago (12/00), Clariant (12/00), The Biesterfeld Group (12/00), Ellis and Everard (01/01), Atofina (01/01) and Engel (03/01).

Governance

In the summer and early fall of 2000, as the e-marketplace boon reached its peak, antitrust issues swiftly became the center of attention. The high profile case before the Securities and Exchange Commission (SEC) involving Covisint, the automotive e-marketplace founded by Ford, GM and Daimler-Chrysler, was monitored closely by every other consortia-led e-marketplace, including Omnexus. Early on, Accenture and the founding members recognized the challenge of Omnexus' neutrality in the eyes of the suppliers, buyers and more importantly of the SEC. According to Stan Vlasminsky, Accenture partner and interim COO,

“The real challenge we had, day one, was related to antitrust. At that point in time, there was a lot of concern about the rise of the consortia. I am not suggesting that the concerns have gone away, but there was a lot more concern at that point in time. We made a call several weeks after the company was grounded. The people who were working on the project from the founders were either going to transition over and work for Omnexus or go back to their organizations.”

To address concerns surrounding antitrust issues, Omnexus and Accenture brought in antitrust legal counsel very early on. Legal counsel had to be present whenever the founding members were in the same room because topics regarding pricing or other consortia related conversations were sure to arise.

In addition, the business and affairs of Omnexus were managed and controlled by its Board of Directors, initially consisting of 11 members as follows: one representative from each Founder, one representative from Omnexus (the CEO), two rotating representatives from the Leadership Suppliers, and three independent directors. Representatives of any entity other than a plastic resin supplier were eligible to become an independent director. It was the intent of the Founders that the independent directors and representatives of Omnexus would comprise a majority of Omnexus Board, irrespective of its size. Board proceedings were strictly governed by antitrust regulation, and legal counsel monitored topics discussed at Board Meetings so as to ensure compliance with antitrust regulation.

Omnexus also planned to have advisory panels. The Supplier Advisory Panel consisted of representatives from the Leadership suppliers, those suppliers who had accepted Omnexus' invitation to join on a priority and equity participation basis. The Buyer Advisory Panel consisted of representatives spanning the broad range of buyers who subscribe to the Omnexus services. As such, the goal was to include large molders and OEMs, as well as medium and small molder representatives. The purpose of these panels was to gain feedback on Omnexus current services and operations and future plans. These panels represented a critical feedback mechanism for the Omnexus management.

Technology Platform & Implementation

In the spring of 2000, as the B2B e-marketplace phenomenon gathered steam, there were few players who garnered as much praise or business as Ariba. Their B2B e-commerce solution software had been implemented by more than 20 of the Fortune 100 companies, including Dow and Dupont, two of the five founding corporations of Omnexus. In addition, ChemMatch, a competing chemicals e-marketplace had adopted the Ariba B2B Commerce Platform in April.

On March 8, 2000, the e-marketplace industry was rocked by the announcement of a powerful alliance between IBM, Ariba and i2 Technologies creating the industry's first end-to-end solution for business-to-business e-commerce¹³. According to the joint press release, the alliance sought to

“Dramatically impact the B2B landscape by providing a solution to automate all business interactions between trading partners, delivering greater cost savings, efficiencies and competitive advantage to global corporations and marketplaces.”

Together, the companies announced plans to offer coordinated open solutions enabling full-service marketplaces, integrated supply chains and open network-based commerce services, including payment, logistics, auction and collaboration to power both enterprises and marketplaces. The proclamation immediately produced a large amount of attention from the press and from e-marketplace contenders.

On June 20, 2000 IBM was officially announced as Omnexus' technical solution provider. Bill Ray, global director eBusiness at Dow Plastics and the company's representative to Omnexus, explained the decision to go with IBM:

"The choice of technology along with speed and thoroughness of implementation is crucial to making Omnexus a success. That's why we turned to IBM and its Ariba/i2 alliance. As leaders in building e-marketplaces, they were the best choice to ensure Omnexus success from the first day onward."

Backed by its alliance with Ariba and i2, IBM's Global Services was selected to build and host the on-line marketplace, provide new member services, and provide on-going support and system service. In addition, Mike Silberman from IBM was appointed interim chief information officer for Omnexus.

IBM proposed to Omnexus a solution that centered on the Ariba 7.0 Marketplace, the transaction engine that would power the Omnexus marketplace. To help facilitate 24x7 availability, scalability, privacy and security, the solution also called for a best-of-breed combination of components including IBM's WebSphere Edge Server, Lotus for content management, Tivoli for security management and MQSeries solutions for systems integration.

- **Tivoli** - Tivoli SecureWay Policy Director was a robust and secure policy management tool for e-business and distributed applications. It was designed to unite core security technologies around common security policies.

¹³ <http://www.ibm.com/press/prnews.nsf/crawler/15A7D0941A8A761B8525693D0077AB13>

- **WebSphere Edge Serve**- Web traffic express component of IBM's WebSphere commerce suite product line and deployed as a reverse proxy server.
- **MQSeries** – Enabled application integration by helping business applications to exchange information across different platforms by sending and receiving data as messages. MQSeries provided a consistent multi-platform, application-programming interface. A key factor was time-independent processing. This meant that messages were dealt with promptly, even if one the recipients were temporarily unavailable.
- **Lotus**- Integrated application services-such as security, workflow and content management-optimized the platform for rapid delivery of collaborative web applications needed to initiate and strengthen key business relationships.

In addition to these IBM products selected to power the marketplace, Omnexus looked to alternative third party vendors to provide additional functionality to the site. These functionalities included: Electronic Bill Presentment and Payment (EBPP), fund verification and transfer capabilities, as well as, a searchable product database.

EBPP – BillingZone.com is an online electronic bill presentment and payment (EBPP) service for business-to-business billers and payers.

Fund verification and transfer capabilities – **Fund verification and transfer functionality was provided** , in affiliation with a group of 5 global banks: Mellon, Bank One, Wachovia, Chase, and Bank of America

Product Database – MCBase powered the searchable product database. Web MCBase was a material database running on an internet/intranet with thousands of grades from 50+ resin producers. With powerful search/query features, Web MCBase allowed the engineer or designer to search the thousands of materials and sort through hundreds of properties to locate the optimal material for an application.

Communication, Coordination and Deadlines

In a very short period, IBM was awarded an important project for their new alliance with Ariba and i2, placed on an aggressive timeline, and received news of a new business-building partner in Accenture, who would look to put its own stamp on Omnexus' original business model. These announcements presented IBM with several challenges as they sought to implement the technology platform by October 1, 2000.

When IBM answered an RFQ from Omnexus in April 2000 for the technical solutions partner, its proposal was based on the business case and model co-authored by Omnexus and their original business-building partner, McKinsey & Co. As June 2000 drew to a close with the announcement of the change to Accenture, it became clear to all involved, that in order to meet their deadlines, Omnexus, IBM and Accenture had to develop a shared mental model of the challenge ahead.

All of the principals, Omnexus, Accenture and IBM had undertaken some amount of risk in the project. Therefore, it was in their best interest to cooperate, communicate and coordinate their combined efforts to achieve success. This meant having to deal with change and cultural differences for the good of the project. Often, this type of coordination was easier said than done. Each partner had different motivating factors, making execution a much more difficult task. For Omnexus, the founders had invested a combined \$50 million to get the business up and running.

In order to continue to attract new investors and additional equity suppliers, the initial success of the project was critical. Accenture was not an equity partner, however, their reputation as a global leader in e-commerce solutions and as a knowledge partner, hung in the balance and their service contract with Omnexus reflected that risk. IBM also had stakes in the project. If the initial phase of the project was a failure, they knew that technology would be a likely scapegoat. For their alliance with Ariba and i2 to grow and prosper early success was important.

Communication was a key issue during the early stages of development for the new partners. Differences in the cultures and business practices existed on many levels. Not only did differences exist between IBM, Accenture and Omnexus; but IBM also had to deal with the same issues on the back-end with its new technology partners. The fact that IBM was putting together a complex solution using “bleeding-edge” technology presented major integration issues. Omnexus was one of the first marketplace projects for the newly formed alliance between IBM, Ariba and i2, although the marketplace chose to utilize only the Ariba and IBM portions. The technologies were being used in new combinations and the actual solution had yet to be deployed. As a result there was a tremendous amount of pressure for IBM, as the integration partner, to make the solution work. Without clear communication between the various partners on issues dealing with business model vision, strategy and integration, the resulting solution could be in jeopardy.

From Accenture’s perspective, coordination with IBM quickly became a “front-burner” issue. Therefore, discussions between IBM and Accenture began prior to the formal announcement was made that Accenture and IBM would be Omnexus’ partners. According to Stan Vlasminsky,

“Upfront, we had to make sure and work with all of the providers, particularly IBM, on just defining what our roles and responsibilities were. The details to which the founders went to had left a lot of gray areas as far as where is business built and where does technology start. This was a challenge that required for the Accenture and IBM management teams to very quickly sit down and openly and honestly hammer out who is on point for what.”

Whatever challenges existed internally, IBM faced a more public challenge that carried more severe consequences. With an October 1st deadline that was fast approaching, risk of failure was definitely a motivating factor. Omnexus had set an aggressive launch date and IBM had to work fast to meet the challenge.

One primary challenge for the partners in building the platform was the functionality and flexibility of the Ariba software. Primarily an e-commerce solution based on MRO-type transactions, such as office supplies or consumer goods, Ariba’s Marketplace had to be adapted to handle the complex direct material transactions proposed through Omnexus. However, in order to meet the October 1st deadline, adaptations had to be made to the platform in order for buyers and suppliers to transact complex purchases of thermoplastic resins.

For the site’s launch, Omnexus, Accenture and IBM set a phased approach to deliver an evolving combination of functionality. Phase 1 was split into two parts, with 1a to be completed by the end of calendar year 2000. **Phase 1a** called for the implementation of the infrastructure, the portal, order capabilities and electronic bill presentment and payment functionality to be completed by three separate deadlines. On October 2, Omnexus officially opened for business with its initial offering of customer registration capabilities and access to the searchable database powered by MCBASE. Sixty days later, on November 30, Omnexus completed its first live

transaction when a custom injection molder purchased \$40,000 worth of Dow polystyrene. Fred Wu, from IBM Research and lead architect for the design phase, described the site’s initial platform:

“You will find generic portal functionality with items such as industry news, instructions and marketing info. The major functionality provided right now is sourcing and ordering. Sourcing links you into the plastics industry catalog, which is MCBase. This is a highly functional source of technical information that allows the users find resins that are suitable for their applications based on the physical characteristics they are looking for. Arbia 7.0 provides the order processing capability, which has been integrated with ERP systems of suppliers that worked with Omnexus and IBM.”

Omnexus and its partners successfully completed Phase 1a and were moving into Phase 1b. In 2Q2001, IBM was charged with upgrading the Ariba platform to its new version, Ariba 7.2E, adding greater speed and flexibility to the order process and enabling Omnexus to globalize its marketplace through the use of new weights, measurements, currencies and languages. By 3Q2001, plans to expand into Europe and other Global destinations, such as Asia would present a whole new set of challenges.

Scaling Up and Scoping Out

In May 2001, with its initial offering available to customers and 14 suppliers successfully committed to Omnexus, the management team faced several decisions in terms of scaling its business and increasing its product scope. In order to achieve site “stickiness”, Omnexus stressed the importance of increasing its functionality an offerings to keep the customers actively engaged with the site. Yaarit Silverstone explained:

“We are going to add on services immediately. It is not about achieving critical mass. Everything is intertwined. It is too simplistic to say that we will not add services until we reach a certain amount of transactions. We need to create stickiness and if we cannot provide those services, we will lose customers who still have to visit many sites or businesses to get what they need.”

The big decision revolved around which to do first: expand the target market or the product scope. With a total market size of \$160 billion, the thermoplastic polymer processing market offers large growth into other segments beyond the \$41 billion injection and blow molder industry (See Table 3).

Table 3: Thermoplastic Polymer Processing Market

Processing Method	Annual Global Purchases (millions)	Percent of Total
Injection & Blow Molding	\$ 41 billion	26%
Rotational	\$ 5 billion	3%
Extrusion	\$ 88 billion	55%
Thermoforming	\$ 8 billion	5%
Other	\$ 18 billion	11%
TOTAL- Thermoplastic Polymer Processing Market	\$160 billion	100%

Source: Omnexus

For all of these processors, the raw material was the same, resins. In addition, the purchasing process is the same regardless of the actual method. Therefore, Omnexus felt there was a great chance to capture a much larger share of the total thermoplastics processing industry by simply offering their services to additional types of processors.

In terms of expanding product breadth, Omnexus’ research indicated there was great overlap into additional chemical based products that these same processors purchase typically from the same suppliers. A foray into new products would allow Omnexus to continue to expand beyond the thermoplastic processing industry and ultimately allow the marketplace to capture a greater proportion of the \$1.6 trillion global chemical market (See table 4). Targeted products include:

Table 4: Additional Chemical Product Expansion

Product Scope Expansion	Annual Global Sales (millions)
Plastics Additives	\$ 15 billion
Adhesives & Sealants	\$ 25 billion
Coatings	\$ 10 billion
Pigments	\$ 2 billion
Titanium Dioxide	\$ 6 billion
Elastomers	\$ 7 billion
Thermosets	\$ 70 billion
TOTAL	\$135 billion

Source: Omnexus

By expanding in both directions, Omnexus could increase its market size from \$51 billion to \$303 billion (See Table 5). Not only would Omnexus expand its reach into new customer and suppliers markets, they would also offer larger processors who employ multiple processing methods greater product selection and alleviate having to deal with multiple vendors in a one-on-one fashion.

Table 5: Omnexus’ Projected Market Expansion

	Initial Focus	Market Size	Expansion	New Market Size
Target Market:	Injection/Blow Molding	\$41 B	Other Processors	\$134 B
Product Scope:	N/A	-	Other Chemical-based	\$135 B
Tooling Impact:	Tools for Target Market	\$10 B	Tools for Processors	\$ 34 B
TOTAL		\$51 B		\$303 B

Source: Omnexus

In addition to growing their overall market size, Omnexus was looking towards value-added services to increase its viability and add dimension to its revenue model. These services included:

- ASP offering – Customizable portal for suppliers who did not wish to build their own buy-direct website. Omnexus was evaluating supplier interest and revenue potential for offering to share Omnexus marketplace functionality with resin/chemicals suppliers.
- Full Integration Services: Full Buyer-side and Supplier-side integration into the Omnexus marketplace. Various levels of integration would be offered to customers, ranging from basic EDI/XML communication to ERP connectivity. Omnexus was evaluating integration partners.
- Supply Chain Services - Virtual distribution services ranging to full supply-chain outsourcing for the plastics industry. To fully leverage the efficiency offered by the Omnexus marketplace, management was evaluating a relationship with distributor(s) to

provide consolidated shipping to resin buyers. In the long-term, Omnexus would determine whether it will offer supply chain outsourcing to suppliers to achieve breakthrough logistics performance.

Looking Ahead

The transfer of power from an interim senior management team composed of Accenture partners to the permanent Omnexus staff headed by Peter Dunning had come at a critical point in the short history of Omnexus. The “Dunning Era” would be evaluated on the execution and scaling of the business model put in place just 12 months ago.

In the online world, time is compressed. The short-term and long-term were often blurred and have proven to be a major stumbling block for many failed B2C and B2B leaders. Interim CEO, Yaarit Silverstone, outlined the short-term and long-term concerns facing Omnexus and Peter Dunning:

“[In the] short-term [Omnexus must] be able to execute every single time and come through on the capability promises we have made and are selling. [This includes] making the right decisions on where to spend your resources.

[In the] long term there is only going to be one winner out there and we have to be it. Liquidity, the number of suppliers, partner selection and when to bring on leading edge capabilities are all critical.”

For Dunning and the Omnexus management team, there were critical decisions that lay ahead that would impact the short-term growth and long-term strategy of Omnexus. Should they scale horizontally or become more vertically integrated? Should they continue to improve the management of their portfolio of business partners in order to achieve goals and meet deadlines? What was the competitive environment and how would it affect Omnexus’ business?

Appendix

Figure 1

Omnexus position within the Chemicals Industry.

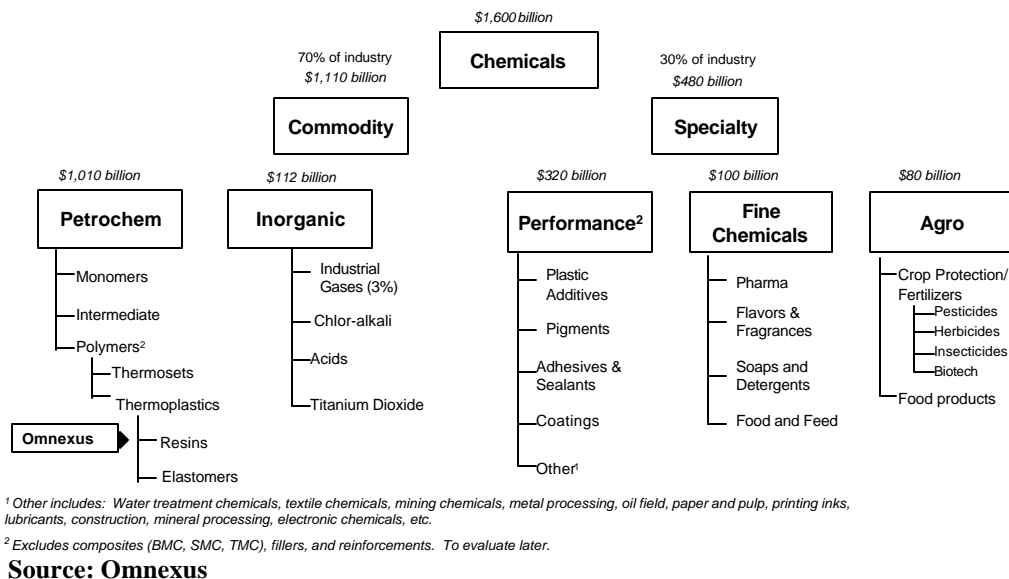
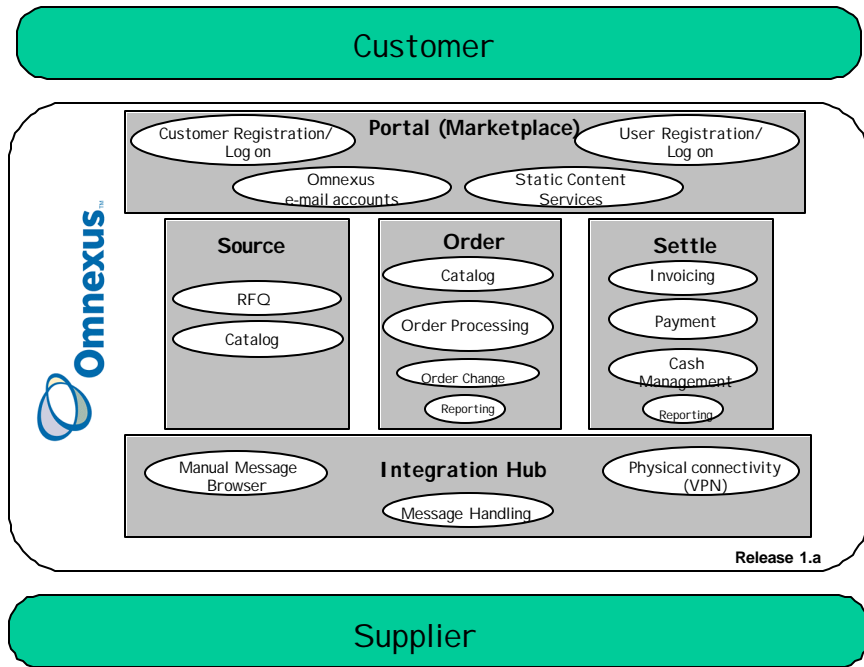


Figure 2

North American Injection and Blow Molding Industry

Size	# of Firms	Annual Revenues	Market Share
Large	200	>US\$30million	>50%
Medium	2700	\$6 million	30%
Small	5000+	<\$1 million	<20%

Figure 3 Omnexus' Initial Functionality



Source: Omnexus

Omnexus Timeline

April 5, 2000 – Founders announce plans to form supplier-led consortia

▲ RFQ put out by Omnexus for strategic and technical partners

▲ June 20, 2000 – Omnexus launched at International Plastics Expo in Chicago
Founders make combined equity investment of US\$50 million
Accenture joins Omnexus in strategic alliance to handle model implementation
Omnexus selects IBM-Ariba-i2 alliance as technology partner

June 22, 2000 - PolyOne joins Omnexus as a Leadership Supplier

June 23, 2000 - Solvay joins Omnexus as a Leadership Supplier

▲ August 22, 2000 - DSM Engineering Plastics joins Omnexus as a Leadership Supplier

▲ October 2, 2000 – Omnexus launches initial version

▲ November 30, 2000 – Omnexus conducts first live transaction

▲ December 13, 2000 – Resinex & Ravgo join Omnexus as Leadership Suppliers

December 18, 2000 – Clariant & Biesterfeld join Omnexus as Leadership Suppliers

▲ January 3, 2001 – Ellis & Everard join Omnexus as Leadership Suppliers

January 21, 2001 – Atofina joins Omnexus as a Leadership Supplier

▲ March, 15, 2001 – Engel joins Omnexus as a Leadership Supplier

April 2000 May 2000 June 2000 July 2000 August 2000 September 2000 October 2000 November 2000 December 2000 January 2001 March 2001