

B2B E-Marketplaces – Interconnection Effects, Strategic Positioning, and Performance

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ABSTRACT

Electronic markets theory leads to the prediction that the “interconnection effects” of information technology will lower coordination costs in market transactions, prompting a move from hierarchical to market arrangements. This prediction was apparently validated by the proliferation of B2B e-marketplaces in the mid-1990s. But the subsequent abrupt consolidation of public, independent e-marketplaces raises questions about what it takes for e-marketplaces to succeed.

Experience with actual e-marketplaces suggests that electronic interconnection effects alone may not explain e-marketplace success. The strategic management literature provides a complementary view, emphasizing the fit between an e-marketplace’s value proposition, its product-market focus, and its value activities. The purpose of this paper, therefore, is to explore the degree to which the strategic positioning perspective contributes to the explanation of e-marketplace success.

We analyzed a pair of e-marketplaces sharing the same competitive space, one successful and the other less so. We found that the number and types of interconnection benefits alone did not make a good explanation of e-marketplace success. However, the additional concepts provided by strategic positioning theory – particularly the holistic fit between benefits types offered (value proposition), product-market focus, and value activities – do appear to explain well the observed differences in e-marketplace performance. Future research should extend our exploratory investigation of e-marketplace success.

Key-words: Electronic marketplaces, Business-to-business e-commerce, Strategic positioning, Brokerage effects, Integration effects, Value proposition, Strategic fit, Strategic alignment gestalts.

RÉSUMÉ

La théorie des marchés électroniques prédit que les effets d'interconnectivité des technologies de l'information baisseront les coûts de transaction, déplaçant ainsi les organisations des hiérarchies vers les marchés. Ceci fut apparemment validé par la prolifération des places de marché électroniques au milieu des années 1990. Mais le mouvement de concentration actuel des places de marché publiques et indépendantes pose la question de leur succès.

A l'aune de l'expérience, l'effet d'interconnection ne peut suffire à éventuellement l'expliquer. La littérature en management stratégique offre une vision complémentaire en mettant l'accent sur la cohérence entre la proposition de valeur, les couples produits-marchés et la valeur des activités. Le but de cet article est d'explorer comment ce positionnement stratégique contribue aussi à l'explication de la performance.

Nous analysons deux places de marché électroniques situées dans le même espace concurrentiel, l'une qui marche et l'autre beaucoup moins. Le nombre et les types d'interconnection ne suffisent à expliquer cette différence de performance. En revanche, le positionnement et la valeur de l'offre paraissent mieux en rendre compte.

Mots-clés : Places de marché électroniques, Commerce électronique – inter-entreprises, Positionnement stratégique, Effets de courtage, Effets d'intégration, Proposition de valeurs, Cohérence stratégique, Configuration stratégique.

I. INTRODUCTION

One of the more interesting recent business phenomena has been the rise and fall of public, independent electronic marketplaces. In 2000, after a period of rapid proliferation that resulted in as many as two-dozen e-marketplaces in a single industry, consolidation began to occur. At the same time, industry consortia and private trading exchanges were set up by established industry players to defend against competitive incursions by the public e-marketplaces (Copacino and Dik, 2001). This situation raises questions about the explanation of e-marketplace success.

Perhaps the best-known theoretical treatment of e-marketplaces is Malone et al.'s application of markets and hierarchies theory (Malone et al., 1987). Malone et al. predicted a move toward arms-length, market-like (many-to-many) commercial arrangements away from hierarchical (one-to-one or one-to-many) transactions, because the advent of "electronic interconnections" reduces coordination costs, the key disadvantage of markets when compared to hierarchies. Reduction in coordination costs arises from three types of electronic interconnection benefits: the communication effect (efficient information flow), the brokerage effect (improved matching of buyer needs with sellers' offerings), and the integration effect (tightened process coupling). While the theory of electronic markets does not specifically address electronic marketplace success, it implies that e-marketplace performance is a function of the ability to provide one or more of the three types of electronic interconnection benefits.

Experience with actual e-marketplaces, however, suggests that electronic interconnection benefits alone are not sufficient to explain e-marketplace success. For example, since the early days of e-marketplaces, few, if any, have succeeded by providing only information (the communication effect). In addition, public, independent e-marketplaces have stumbled owing to suppliers' reluctance to join out of fears of price erosion (the brokerage effect). These anecdotal observations imply that we must look beyond electronic interconnection effects for an explanation of e-marketplace success. Strategic management literature provides such a broader view. Strategic positioning theory (Porter, 1996), concerned with the fit between a company's value proposition, its products/market focus, and its unique value activities, proposes an explanation of e-marketplace performance.

The purpose of this paper is to explore the degree to which the strategic positioning perspective contributes to an explanation of e-marketplace success. After providing theoretical background, we present a pair of public, independent e-marketplaces that share the same competitive space, one successful and one that is struggling. We analyze the ability of strategic positioning theory to explain the outcomes observed in these two cases.

II. THEORETICAL BACKGROUND AND RESEARCH QUESTIONS

This section briefly discusses electronic markets theory and strategic posi-

tioning theory as they apply to public, independent e-marketplaces and the research questions raised by these theoretical perspectives.

II.1. Electronic Markets Theory and Empirical Experience

Since the rise of large corporations, inter-organizational commercial transactions have tended to exhibit hierarchical (one-to-one or one-to-many) characteristics rather than market (many-to-many) characteristics. For instance, companies have preferred to deal closely with a relatively small number of familiar suppliers, owing to the costs involved in coordinating at arms length with many suppliers (Clemons et al., 1993). Market-like relations have traditionally been costlier, because of the effort required to determine design, price, quantity, and delivery schedule as well as myriad other details involved in selecting suppliers, negotiating contracts, and paying bills (Malone et al., 1987). On the other hand, market-like relations are typically associated with lower product prices.

Electronic markets theory predicts a move toward market-like arrangements resulting from three types of "electronic interconnections benefits" associated with information technology (Malone et al., 1987). *Communication effects* allow more information to be communicated in less time and cost. *Brokerage effects* bring together many buyers and sellers and improve matching through increasing the number of alternatives considered, increasing the quality of alternatives selected, and decreasing the cost of the selection process.

Integration effects are the tightening of process coupling between value added stages. These three types of interconnection benefits with varying degrees of emphasis can be observed in the three different types of empirical electronic marketplaces that have appeared in the last decade (public independents, industry consortia, and private trading exchanges).

II.1.1. Public, Independent E-Marketplaces

The first wave of Internet-enabled e-marketplaces (1995 to 1999) was the public, independent intermediary, usually a "dot-com" entrepreneurial venture. Public, independent e-marketplaces are the type of e-marketplace most likely to emphasize communication and brokerage benefits. These e-marketplaces sought to reduce buyers' search costs by bringing together price and product information from many suppliers (communication effect). In addition, they proposed to reduce the cost of products traded in the e-marketplaces through the "matching" enabled by increased price transparency (brokerage effect). Sellers would also benefit from lower costs of disseminating product information to potential new customers.

Public, independent e-marketplaces originally depended heavily on advertising and listing fees as their primary sources of revenue. Those that enabled online transactions were also able to charge transaction fees. Many offered post-matching services, such as quality assurance, arranging for logistics, escrow, and were able to charge additional fees for those services.

Public, independent e-marketplaces are characterized by network externalities, such that the benefits of participating increase with the participation of many (or key) suppliers and buyers (Bakos, 1991). However, sellers generally resist disseminating price information, which threatens to erode their profits (Bakos, 1991). Because sellers and buyers benefit differently from IT-enabled brokerage, e-marketplaces founded on a “value proposition” of price transparency may fail owing to supplier resistance. Reluctance of suppliers to participate owing to price pressure concerns has been noted as a factor in accounts of the slow takeoff and limited success of public, independent e-marketplaces (Wise and Morrison, 2000).

II.1.2. Consortium E-Marketplaces and Private Trading Exchanges

Around mid-2000, when many public, independent e-marketplaces were faltering, incumbent firms in diverse industries joined forces to form consortium e-marketplaces for mutual benefit. At about the same time, technology analysts began advising large companies to develop private trading exchanges (electronic hierarchies).

Consortium e-marketplaces are frequently founded by large buyers and/or sellers in an industry. Their commitment to putting a large proportion of their procurements through a consortium e-marketplace provides instant critical mass, contributing to easier startup and likelier success than is

the case with public, independent e-marketplaces. For example, Covisint, the consortium founded by Ford, GM and Daimler Chrysler, saw a transaction volume of \$100m in their first year of operation, because Ford, channeled \$96b of its procurement to Covisint¹.

In consortium e-marketplaces, the founders are mainly seeking reductions in the cost of conducting business with current business partners as well as other collaboration benefits. Few consortium e-marketplaces emphasize reducing the cost of primary traded products through auctions, in part owing to supplier resistance. They may, however, provide auctions for unloading excess inventory, where the chance of price erosion is lower. The value proposition of consortium e-marketplaces, therefore, emphasizes integration benefits – enabling large buyers or suppliers to transact with their established business partners online through the provision of direct material procurement functionality. Communication and brokerage benefits are much less central than for public, independent e-marketplaces. Consortium e-marketplaces’ revenues usually come from founder membership fees, transaction fees, and fees from integration software solution sales, hosting, implementation, and consulting.

Private trading exchanges are set up by single large buyers or suppliers to transact with their network of partners. They are essentially one-to-many networks, typified by initiatives of WalMart and Cisco. Private trading exchanges

¹ <http://fortune.cnet.com/fortune>

have the strongest emphasis of the three types of e-marketplaces on integration benefits and usually boast the most sophisticated e-marketplace capability in support of deep collaboration (Brooks, 2001). Since private trading exchanges are closed to all firms other than current trading partners, discovery of new buyers or suppliers is not one of their key objectives, and hence communication and brokerage benefits are minimal. Private trading exchanges are funded by the companies that own them;

these companies hope to recoup their investments through efficiencies in procurement or sales activities.

The current wisdom among e-marketplace industry analysts is that all three types of e-marketplaces (public independents, industry consortia, and private trading exchanges) are needed, as each provides different types of benefits. Table 1 compares the types of e-marketplaces in terms of the electronic integration benefits they offer.

E-Marketplace Type/ Benefit Type	Definition	Public, Independent (Dot-coms)	Industry Consortia	Private Trading Exchanges
Definition		First wave of e-marketplaces in mid-1990s, operated for profit by third party, open to all buyers/sellers in particular industry segments; most vulnerable to startup problems	Second wave of e-marketplaces around 2000; response by traditional industry incumbents, operated by industry members, easing startup problems	Electronic hierarchies, set up by single large buyer/seller for transacting business with established suppliers or customers; closed membership
Communication Effect	More information communicated in less time and cost, enabling better partner, product, and price search	Emphasized from early days for attracting members and providing value	Not emphasized	Communication of product and availability information emphasized
Brokerage Effect	Many buyers and sellers brought together and matched, enabling reduction in price of traded products	Essential for finding new partners and driving down price of traded products	Not emphasized	Not pursued, since private trading exchanges are closed to all but existing partners
Integration Effect	Tightened process coupling, reduces cost/improves efficiency of purchasing/sales transactions and other forms of collaboration	Not important in early days, but emphasized after about 2000, when suppliers balked at joining public e-marketplaces out of fears of price erosion	Key part of the value proposition, focus on easing transactions among existing business partners, but also facilitates switching partners	Key part of the value proposition, focus on easing transactions with current partners

Table 1: E-Marketplaces and Electronic Interconnection Benefits

As consortium e-marketplaces and private trading exchanges take off and absorb much of the mission critical direct materials procurement volume that independent public e-marketplaces were hoping for, analysts predict that the number of public, independent e-marketplaces will fall from a high of nearly 2000 to a steady state of around 500 (Brooks, 2001). Thus, questions about the success and failure of public, independent e-marketplaces are interesting. What differentiates thriving public, independent e-marketplaces from those that are struggling to survive?

II.1.3. Public, Independent E-Marketplaces and Electronic Interconnection Effects

The startup problems encountered by many public, independent e-marketplaces and the competitive threat posed by consortium e-marketplaces and private trading exchanges caused many public independents to reassess their strategies. In the last few years, many public, independent e-marketplaces declared that they would pursue integration benefits by adding capabilities intended to promote transaction efficiency and collaboration effectiveness (Davenport et al., 2001). Some industry experts believe that revenues from integration-based collaborative commerce will eventually exceed revenues from brokerage-based services (Raisch, 2001). This suggests that public, independent e-marketplaces that add electronic integration benefits to communication and brokerage effects may be *more successful* than those that do not.

On the other hand, there may be a fundamental trade-off between brokerage and integration benefits (Davenport et al., 2001). Brokerage benefits are greatest when there are many buyers and suppliers making arms-length transactions. Integration effects, on the other hand, require investing in standard procedures and formats, which is most likely to occur among trading partners with strong prior relationships. This suggests that public, independent e-marketplaces that add electronic integration capabilities to communication and brokerage capabilities may be *less successful* than those that do not.

Research Question 1, then, concerns the effects of electronic interconnection benefit types on the success of public, independent e-marketplaces:

RQ1. Does electronic interconnection benefit type (communication, brokerage, integration effects) explain public, independent e-marketplace performance? Specifically, does having more benefit types lead to higher performance? And does having integration benefits plus communication and brokerage benefits lead to higher (or lower) performance than having only communication and brokerage benefits?

II.2. Strategic Positioning Theory

The strategy literature offers a complementary perspective on e-marketplace success and failure. A widely shared belief in the field of strategy is that fit between a firm's strategy and its environment has positive implications for firm performance (Miller, 1988; Venkatraman and Prescott, 1990; Zajac

et al., 2000). Perhaps the most influential of strategy theories is Porter's theory of competitive advantage, which argues that firm performance is the result of strategic position within an industry. A firm's strategic position is its stance with respect to customers, suppliers, and competitors; strategic position involves the customers and product segments a company serves and the value it provides to them. "Similar" firms may differ in their positioning, and new strategic positions emerge when customers' needs change, new channels appear, and new technologies become available (Porter, 1996). For example, the strategic position of public, independent e-marketplaces can be viewed as a response to the Internet's electronic interconnection capabilities for improving the efficiency and effectiveness of business-to-business supply chains.

According to Porter, a strong strategic position – one that confers competitive advantage and leads to successful performance – requires that several elements be fitted together to form a desired configuration (Venkatraman and Camillus, 1984; Porter, 2001). The desired configuration is characterized by simultaneous fit between 1) the unique value proposition offered by the firm, 2) the product-market segment(s) targeted, 3) a set of distinctive value activities aligned with the value proposition.

**II.2.1. Value Proposition,
Product-Market Focus,
and Value Activities**

The *value proposition* is a central concept in strategic positioning theory,

linking the product-markets targeted with the value activities of the firm. The value proposition is the set of benefits offered by the firm to its customers. A firm that is able to offer customers a unique value proposition distinguishes itself from its competitors. In the context of e-marketplaces, there are two distinct types of customers – buyers and sellers. The benefits offered to both buyers and sellers are broadly categorized in terms of communication, brokerage, and integration effects, defined above:

- Communication benefits to buyers include providing information on suppliers and products and may also include price transparency, while communication benefits to sellers emphasize better information provision and service to their customers (www.netmarketmakers.com);
- Brokerage benefits are similar for buyers and sellers, since both get access to new partners and the opportunity to profit from auctioning surplus inventory. However, the brokerage benefits for buyers may include lower prices through increased price transparency, and this is clearly not a benefit to sellers;
- Integration benefits for buyers and sellers are similar in terms of lowered transaction coordination costs through automation of ordering and fulfillment processes.

Uniqueness of an e-marketplace value proposition may arise from the *mix* of different types of benefits (e.g., some e-marketplaces may emphasize brokerage benefits, while others emphasize integration benefits), or in *specific features* of a benefit type (e.g.,

unusually comprehensive and easy-to-use content in the communication benefit type).

A firm's value proposition should be tailored to the particular *product-market segment(s)* it targets (Porter, 1985). Product-market segments are defined by product characteristics and customer characteristics. Product characteristics include size, price features, inputs, performance, etc., while customer characteristics include industry, technology sophistication, size, geography, etc. (Porter, 1985). In identifying the product-market segment(s) it wishes to target, a firm faces the fundamental choice of whether to be broadly focused (serving many product-market segments), or narrowly focused (serving one or few product-market segments). A broadly focused strategy assumes that the firm will be able to leverage its services across multiple segments and reap significant value from economies of scope and scale. A narrowly focused strategy assumes that the firm will compete by closely tailoring its value proposition and services to the single or few product-market segments targeted.

In the context of e-marketplaces, products are direct or indirect materials traded between buyers and suppliers on the e-marketplace. The products can derive from a single industry or from multiple industries. E-marketplace customers are the types (in terms of size, geographic location, or needs) of participating buyers and sellers. An e-marketplace may target different types of buyers and sellers. For example, it may target large, global buyers and small, Asian suppliers.

A successful value proposition is delivered via the *value activities* of the firm. The extent to which the value activities support the value proposition is an important determinant of the strength of the firm's strategic positioning. A frequently cited exemplar of strong fit is SouthWest Airlines' low cost, "value for money" value proposition and its value activities that include "no frills" service and highly rationalized, cost effective processes (Porter, 1996). The uniqueness of a value proposition is also enabled by the distinctiveness of its value activities – this may arise from doing a different set of activities from competitors, or from doing similar activities in a different way.

In the e-marketplace context, a slew of value activities supporting communication, brokerage and integration effects have been identified. We group them into six broad categories that reflect the stage of the transaction cycle being supported (Weller, 2000):

1. Content provision (industry news and discussion forums);
2. Matchmaking (catalogs, request for quote/proposal (RFQ/RFP), auctions, negotiation);
3. Post-sale transaction automation (online purchase order, invoices, and payment);
4. Logistics facilitation (warehousing, transportation);
5. Collaboration support (supply chain management, sharing of inventory information, sharing of design information);
6. Other (software implementation services, consulting, training).

Strategic positioning theory's key concepts of value proposition, product-market segments, and value activities, along with their implications for e-marketplaces, are summarized in Table 2.

II.2.2. Conceptualizing Fit

According to strategic positioning theory, a successful public, independent e-marketplace would be expected to have better fit among its value proposition, its product-market segments, and its value activities than an unsuccessful public, independent e-marketplace. But, before we can empirically examine the strategic fit of public, independent e-marketplaces, we must first specify how we conceptualize the nature of the fit (Venkatraman, 1989). Broadly, strategic fit can be considered as the *bivariate* alignment between pairs of the three elements of strategic position (value proposition, product-market focus, and value activities) or as the *holistic* alignment of all three elements concurrently (Venkatraman and Prescott, 1990; Zajac et al., 2000). In recent years, strategic fit researchers have preferred the more challenging holistic approach to fit, because analyses of fit between pairs of elements lead to problems of interpretation when some pairs are significant and others are not or when pairs found to be significant indicate contradictory strategies.

Among the holistic, multi-dimensional approaches to assessing fit, are *profile deviation* fit and *gestalt* fit. Briefly, profile deviation assumes an ideal strategic profile for a given environment; fit is assessed as the extent of

deviation from that ideal. Given the newness of the e-marketplace phenomenon and the exploratory nature of this study, the profile deviation approach is not appropriate. We therefore choose to conceptualize fit as *gestalt*. Gestalts are frequently recurring clusters of attributes (Miller, 1981), manifesting as a limited set of archetypes. Miller, a long-time proponent of this approach, emphasized in a recent review (Miller, 1996) that the usefulness of gestalts lies in understanding how and why the attributes of each type are interrelated. He therefore advocates surfacing the major theme(s) that tie the various attributes or elements together. While the approach has traditionally relied on inductive methods, it is greatly strengthened when guided by theory.

Achieving fit between value proposition, product-market segment, and value activities takes time and effort to develop and refine. A firm that achieves a high degree of fit will find that competitors have difficulty duplicating its strategy quickly (Porter, 2001). Thus, companies with strong competitive positions tend to outperform those with weak competitive positions. In this way, the strategic positioning theory concept of fit (with product-market segment and with distinctive value activities) can provide a link between the electronic markets theory concept of electronic interconnection benefits (a value proposition) and public, independent e-marketplace success.

Achieving fit also requires making conscious trade-offs in strategic positioning (Porter, 2001). Trade-offs are needed because different strategic po-

Construct	Key Attributes	Applied to e-Marketplaces	Operationalization in This Study
<p>Value Proposition</p>	<ul style="list-style-type: none"> • Benefits offered to customers • Uniqueness of value proposition important for a strong strategic position 	<ul style="list-style-type: none"> • Includes communication, brokerage, and integration benefits • Uniqueness may arise from mix of types of benefits, as well as the extent of the benefits 	<p>Website statements about benefits to buyers and to sellers in three categories:</p> <ol style="list-style-type: none"> 1. Communication – ability to transmit and access large amounts of information quickly and at low cost 2. Brokerage – access to large numbers of buyers and suppliers, consideration of many alternatives and selection of best alternative quickly and at low cost 3. Integration – tight coupling of buyer and supplier processes enabling lower inventory levels, greater responsiveness
<p>Product-market Focus</p>	<ul style="list-style-type: none"> • Segmentation based on product and customer characteristics • Product characteristics include size, price features performance, etc. • Choice of being broadly targeted (many segments) or narrowly focused • Customer characteristics include industry, buyer strategy, technology sophistication, size, ownership, geography, etc. 	<ul style="list-style-type: none"> • Product focus refers to products traded on the marketplace • E-Marketplaces can be focused narrowly on few industries or broadly on multiple industries • Customers include both e-marketplace buyers <i>and</i> supplier. • Buyer <i>and</i> supplier focus varies by size and geography 	<p>Website statements and observed capabilities for:</p> <ol style="list-style-type: none"> 1. Product segments – Categories of products traded among buyers and suppliers, eg. electronic components, computers, fashion, healthcare, ... 2. Customer and supplier segments – Characteristics of buyers and suppliers on two dimensions <ol style="list-style-type: none"> a. Size – eg. large multinational corporations, small and medium enterprises b. Region – eg. North America, Asia, Europe, Middle East
<p>Value Activities</p>	<ul style="list-style-type: none"> • Activities performed by the firm in order to provide value to customers • Disjunctive value activities contribute to strong strategic position • Distinctiveness comes from different value activities or from doing value activities differently 	<ul style="list-style-type: none"> • Value activities offered by e-marketplace can be broadly classified as: content provision, matchmaking, transaction processing, physical facilitation, collaboration support 	<p>Observed website capabilities for:</p> <ol style="list-style-type: none"> 1. Content provision – industry news, discussion forums 2. Matchmaking – aggregated catalogs and sellers' public storefronts, capabilities for supplier/product search, REP/RFQ, auction/reverse auction, and online negotiation 3. Post-sale transaction automation – buyer's catalogs and portals, online P.O., invoicing, payment 4. Logistical facilitation – warehousing, transportation, quality assurance 5. Collaboration support – private sellers' extranets with pricing personalized to individual customers, inventory visibility, design sharing 6. Other – e.g., software licensing, consulting

Table 2: Operationalizing Strategic Positioning Concepts

sitions require distinctive value activities. For example, value propositions based on brokerage effects require providing access to many suppliers and buyers, who would not all have prior relationships with each other. By contrast, value propositions based on integration effects require mechanisms to couple processes and information sharing more tightly between trusting buyers and suppliers (Davenport et al., 2001). Therefore, as public independent e-marketplaces attempt to broaden their value proposition to include integration benefits, they will need to address the issue of maintaining fit with the different types of value activities these different value propositions require.

II.2.3. Public, Independent E-Marketplaces and Strategic Fit

In summary, drawing on Porter's theory of strategic positioning and conceptualizing fit as gestalt, we propose that better public, independent e-marketplace performance will be associated with a higher degree of *concurrent* fit among e-marketplace value proposition (in terms of communication, brokerage, and integration effects), product-market focus (product verticals, buyer and supplier type and geography), and value activities (content provision, matchmaking, post-sale transaction automation, logistics facilitation, and collaborative support). The reasoning above suggests research question 2:

RQ2. Does fit between value proposition, product-market focus, and unique value activities explain pu-

blic, independent e-marketplace performance? In particular, are public, independent e-marketplaces able to support successfully a value proposition that combines both brokerage and integration (believed by some to be in conflict)?

III. METHODOLOGY

This study raises descriptive and explanatory questions that are well suited to the case study research strategy (Yin, 1984). In particular, the goal of understanding how and why strategic positioning concepts are related is best met by rich qualitative case studies (Miller, 1996). In this paper, we focus on public, independent e-marketplaces, because, as the first type of e-marketplace to emerge, they have the longest histories (5 years), sources of data are richer, and there are some performance track records. Within this domain, we sought e-marketplaces that were similar in their broad strategies (e.g., broadly focused or narrowly focused) but that had different levels of performance (clearly thriving or clearly struggling). To assess the latter requirement objectively, we chose publicly listed e-marketplaces with published financial statements and other operating performance information. Finally, given our interest in the brokerage and integration aspects of value propositions, we sought e-marketplaces with different mixes of these value elements.

Given this list of criteria, we reviewed listings of B2B e-marketplaces, identified possible e-marketplaces, and reviewed their websites and industry re-

ports. From these, several pairs were selected for further analysis. This paper presents one pair, the first in our ongoing program of research – **Global Sources** and **VerticalNet** – that meets well all our selection criteria. Both are independent and are publicly listed, providing access to financial performance data. The two e-marketplaces pursue roughly similar strategies, both targeting a broad range of product-market segments in the international trading industry. (Both are considered “multi-vertical” marketplaces.) Indeed, they are direct competitors in some industry verticals, such as electronics. Since both companies began operating (in 1995), **Global Sources** has been consistently profitable, and **VerticalNet** has not yet turned a profit. (Detailed performance data are presented and discussed in a later section.) **Global Sources** appeared to be more oriented towards the communication and brokerage value proposition, while **VerticalNet** had strong integration elements as well as communication and brokerage in its value proposition. These characteristics make **Global Sources** and **VerticalNet** an instructive comparison for purposes of answering research questions related to strategic positioning theory and e-marketplace performance.

III.1. Operationalization

Strategic position is defined in terms of value proposition offered, product-markets targeted, and value activities performed. Table 2 defines these concepts, applies them to e-marketplaces, and shows how the definitions were operationalized for this study. A few points bear note:

- The value proposition benefits offered to e-marketplace buyers and sellers – in terms of communication, brokerage, and integration effects – were assessed from e-marketplace self-statements on their websites;
- Product-market focus was operationalized in terms of the industries served by the e-marketplace operator – e.g., electronics, healthcare, fashion merchandise – and the size and geographic location of buyers and suppliers. These attributes were determined from observation of website features as well as self-statements by the e-marketplaces;
- Value activities were classified into 6 types by synthesizing from a larger set of categories identified by Weller (2000): content provision, matchmaking, post-sale transaction automation, logistical facilitation, collaboration support and other. These attributes were determined from observation of website features as well as self-statements by the e-marketplace. A key distinction was made between sellers’ catalogs that are publicly accessible (a “matchmaking” activity) and private sellers’ extranets that allow for personalized interactions (e.g., differentiated pricing) with buyers (a “collaboration support” activity). The former facilitates achieving the matching effect; the latter facilitates the integration effect.

III.2. Data Collection and Analysis

Data for the study were obtained from company websites, annual reports, analyst and press reports. The

data were read by two independent coders, who assigned codes to each paragraph, following the definitions in Table 2. The **Global Sources** case was used to train the coders. The level of agreement between the two independent coders (number of paragraphs assigned the same code by both coders divided by the total number of paragraphs) for the **VerticalNet** case was 96%.

After coding, within-case analysis was performed by summarizing and classifying value proposition, pro-

duct-market focus, and value activities for each e-marketplace. For each e-marketplace, the fit among value proposition, product-market segment and value activities was assessed. To help us recognize good fit, we developed two “good fit” gestalts, suggested by the literature on e-marketplaces. As Miller (1996) noted, gestalts are organized around themes. In the context of this study, the organizing theme for each gestalt is the type of value proposition – communication and brokerage or integration. (See Figure 1).

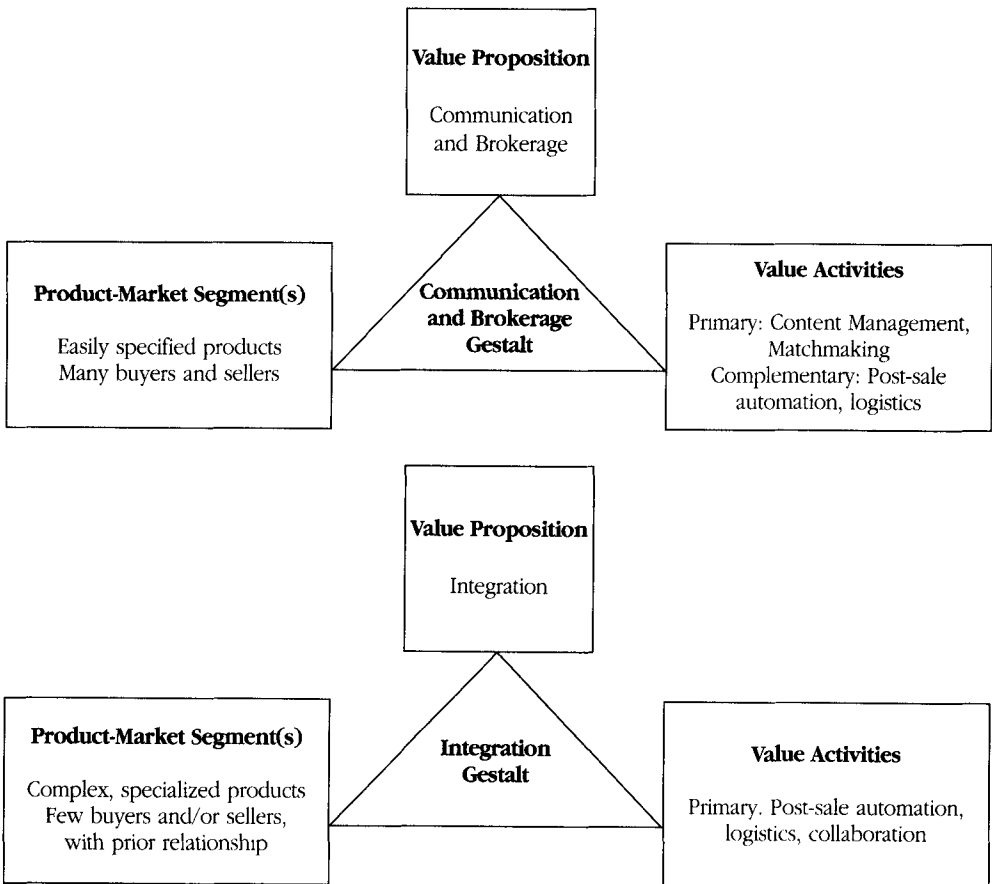


Figure 1: “Good Fit” Gestalts Suggested by e-Marketplace Literature

The *communication and brokerage gestalt* fits a product-market context where the product is easily specifiable (more commodity-like) and the buyers and/or sellers are fragmented (Bakos, 1991; Kaplan, 1999). The value activities most closely supporting such a value proposition are content management and matchmaking. Post-sale automation and logistics may also support the brokerage value proposition to the extent that the convenience and efficiencies offered by “one-stop” service draws many buyers and sellers to the e-marketplace.

The *integration gestalt* fits a product-market context where the buyers and sellers have a prior relationship with each other and/or where the product is complex and difficult to specify (Davenport et al., 2001). The prior relationship among a smaller number of buyers and sellers makes it easier to overcome the investment and trust barriers to adoption. The difficult to specify nature of the product also makes it difficult for the buyers and seller to use a pure arms-length brokerage model. The value activities most closely enabling the integration value proposition are collaboration support, post-sale automation, and logistics.

The e-marketplace literature was silent on the profile of a public e-marketplace attempting to pursue both the brokerage and the integration value propositions. Some literature suggests that adding integration functions to a brokerage-centered e-marketplace would improve its performance (Raisch, 2001). Other literature, however, presents a different view (Davenport et al., 2001).

Once the gestalts of each of the two case studies were developed, the fit between value proposition, product-market focus, and value activities was assessed and compared to the gestalts suggested by the e-marketplace literature. Fit was assessed by comparing and contrasting the coded statements about each of the three strategic position concepts (summarized in Table 4). Subsequently, fit was portrayed graphically (Figure 2) using conventions similar to those used in documenting the gestalts.

IV. CASE BACKGROUND AND PERFORMANCE

The cases selected for this study have several important similarities. Both e-marketplaces had their roots in trade directory publishing and were early movers among B2B e-marketplaces. Both started online operations in 1995, and both target multiple verticals segments in the international trading industry. Both compete in some industry verticals, such as electronics. However, they have different histories and performance outcomes.

IV.1. Global Sources

Global Sources began life in Hong Kong in 1971 as Asian Sources, a company devoted to producing trade publications focused on consumer products made in Asia for export to Western markets. Over time, separate trade publications evolved for specific market niches such as electronics, hardware, timepieces, and fashion accessories.

The company also expanded geographically, opening offices in Japan, Korea, Taiwan, USA and Europe. With the liberalization of trade in China, Asian Sources, based in Hong Kong, targeted the many firms in China that lacked a means of reaching prospective buyers outside of China. By 1993, the company had become Asia's largest trade publisher with more than 1,300 employees in 29 countries. The employees largely comprised advertising and editorial staff. Asian Sources represented 6,300 suppliers in eight industries and helped them advertise their products through its print magazines and CD-ROM directories.

In 1995, the company launched Asian Sources online. The company quickly migrated to the new e-marketplace its product listings and industry content for the general merchandise, fashion, home center/hardware, electronics components, computers/electronics, telecommunications, manufacturing and services vertical industries. Asian Sources did much to bring its traditional network of suppliers online. For example, it worked out bulk arrangements for suppliers with telecommunications firms like AT&T. Its 700 sales representatives worked with suppliers to incorporate their product information on the site. By 1998, Asian Sources had 7,200 supplier sites offering 37,000 products. Large buyers such as Sears, Liz Claiborne, Eddie Bauer, Dell, and Compaq, which had used Asian Sources print and CD-Rom directories, now also accessed the e-marketplace. By 1998, Asian Sources was receiving online inquiries from 10,000 potential buyers per week.

Asian Sources' main source of revenue was fees from supplier storefront hosting and from product listings. It also charged members who subscribed to its alert service – emailed notifications when products or suppliers meeting their specifications were found. The company did not provide the capability for online transactions and therefore did not charge transaction fees.

In 1999, the company was renamed **Global Sources**, reflecting its intention to grow in geographic scope. In 2000 and early 2001, the company set up geographically focused e-marketplaces for Korea, Thailand, Singapore, Turkey, India, and Malaysia. This was done, in many cases, through a franchise model, in order to leverage the partner's access to local suppliers and buyers. **Global Sources** also began piloting online transaction software. It also offered more sophisticated content management capabilities (for a fee) to its buyers and suppliers via its Private Buyer Catalog and Private Seller Catalog services. These allowed buyers and sellers to customize for themselves the products that they wanted to view or to offer respectively. Today, the tagline on all **Global Sources**' publications remains "Enabling global merchandise trade".

IV.2. Vertical Net

VerticalNet started up in 1995, intent on building a portfolio of vertical industry communities, beginning with the wastewater industry, where its founders had previous trade publication experience. The number of communities proliferated rapidly to 59 by mid 2001 across 14 broad sectors such

as communications, energy, healthcare/science, high tech, and so on. Within each broad sector there were numerous specific verticals, such as digital broadcasting, fibre optics and photonics within the communications sector.

VerticalNet's communities are collections of information that would be of interest to industry professionals. They include industry news, career openings, product reviews, educational events, articles, discussion forums, and so on. Suppliers are invited to set up virtual storefronts and to pay for banner advertisements. The aim of creating these communities was to attract buyers in the specific industries. Buyers could then place requests for quotes and requests for proposals and also search for suppliers. The e-marketplace served as a lead generator, not as a transaction enabler. Most of **VerticalNet's** revenue therefore comes from advertising fees, storefront hosting, and providing sales leads to suppliers.

Since 1999, the company has been actively seeking to increase revenues from transaction fees and software licensing, in anticipation of declines in advertising revenues. To increase transactions fees, it acquired NECX.com – a major electronics exchange with sales of \$350m and gross profit of \$37m. NECX also expanded **VerticalNet's** geographic presence with its established user base in Europe and Asia. To establish a presence in software licensing, **VerticalNet** acquired Isadra Inc. and Tradeum, two software companies focusing on procurement and transaction software capabilities. By mid 2000, more than half of **Verti-**

calNet's revenues were from transactions and software licensing.

VerticalNet then sought to leverage its new transaction and software capabilities by encouraging more online transactions in their communities as well as by selling their software to industry consortia and private trading exchanges. In early 2000, **VerticalNet** signed an agreement whereby Microsoft would purchase 80,000 storefronts and resell them to Microsoft's business customers. By end 2000, the number of storefronts had increased sixfold to 18,700. Also in 2000, **VerticalNet's** need for operating cash led the company to sell NECX, its only profitable unit, to Converge – an electronics industry consortium e-marketplace – in exchange for \$60m cash and 19.9% equity stake in Converge. Converge has also contracted to use **VerticalNet's** software.

With these changes, **VerticalNet** now has two strategic business units. **VerticalNet Markets** is an e-marketplace operator that provides “hosted e-commerce and community capabilities for corporate division and small and medium size businesses”. **VerticalNet Solutions** is a technology company that “offers software solutions to industry alliances, independent net market markets and global 2000 enterprises” and “software solutions that focus on direct materials procurement targeted towards discrete manufacturing processes within large enterprises”.

IV.3. Performance

Despite their similarities (e-marketplace operators for multiple vertical seg-

ments of the trading industry, back-grounds in trade publishing, and initial focus on brokerage and communications), **Global Sources** and **VerticalNet** have different levels of performance. **Global Sources** has been consistently profitable and has won many awards from leading institutions such as Forbes. **VerticalNet** is still not profitable and has been criticized by industry analysts for its strategy and performance. Table 3 provides a summary of financial performance indicators.

V. FINDINGS

In this section we report the answers to our two research questions about the explanation of the performance

differences between **Global Sources** and **VerticalNet**.

V.1. Electronic Integration Benefits and e-Marketplace Performance

The first research question asks whether the benefits offered by an e-marketplace explain its performance, where *benefits* refers to the effect types (communication, brokerage, integration) posited by electronic markets theory. Specifically, the theory implies that having more types of benefits is better than having fewer, and recent experience with electronic marketplaces suggests that having integration benefits may be better than having

Metrics	Global Sources		VerticalNet	
	Revenue ²	Profit (Loss)	Revenue	Profit (Loss)
Financial Performance				
2000	\$105,2M	(68,2M) ³	\$112,5M	(\$311,0M)
1999	\$91,9M	\$10,9M	\$20,8M	(\$53,5M)
1998	\$95,9M	\$11,6M	\$3,1M	(\$13,6M)
Other Performance Indicators				
Industry Awards	<ul style="list-style-type: none"> • Asian Innovation Award (<i>Far East Economic Review</i>, 1998) • Web Business 50/50 (<i>CIO Magazine</i>, 1999) • B2B Best of the Web, (<i>Forbes Magazine</i>, 2000) • Asia Best B2B Website (<i>Asiaweek</i>, 2000) • 200 Best Small Companies (<i>Forbes International</i>, 2001) 			

Table 3: E-Marketplace Performance Indicators

² Percentage of revenues from online marketplace 2000–60%, 1999–35%, 1998–15%, remainder from print based publications

³ This sharp drop in profits is attributed to a share transfer of \$60m to the CEO and founder of the company.

communication and brokerage either singly or in combination.

The first row of Table 4 presents the value propositions (stated benefits for buyers and suppliers) of **Global Sources** and **VerticalNet**, organized by effect type. **Global Sources**, the high performing e-marketplace, has only two benefit types (communication and brokerage). These benefits are evident in its statements about providing cataloging and messaging and access between its large network of Asian suppliers and over 259,000 buyers worldwide. **Global Sources** makes no statements about the integration benefit type that might be expected to deliver higher business value.

On the other hand, **VerticalNet**, the lower performer, has all three benefit types. **VerticalNet**'s communication and brokerage benefits are evident from its statements about providing comprehensive industry information, enabling buyers to quickly locate products, and helping suppliers showcase their products in its many vertical marketplaces. In addition, **VerticalNet** offers integration benefits through support for private extranets, personalized pricing, and so forth¹. Furthermore, **VerticalNet** appears to place greater emphasis on integration benefits than it does on communication and brokerage benefits. The **VerticalNet** homepage, for example, is almost entirely

devoted to the eXtended Enterprise Management Solution and its benefits of enabling integration across business units within a corporation and with external trading partners via information sharing and supply chain visibility. Yet, **VerticalNet** – with more types of benefits, including integration benefits – is a lower performer than **Global Sources**.

These results are *opposite* to expectations derived from electronic markets theory and recent e-marketplace experience, which suggest that more benefits, and particularly integration benefits, are better; they are more in line with arguments of e-marketplace industry analysts who argue for an incompatibility between the strategic aims of brokerage and integration value propositions (Davenport et al., 2001). Differences in benefit type alone do not make a good explanation for differences in the performance outcomes of these two marketplaces.

One reason for these findings might be that the e-marketplaces' *stated* benefits are not the same as the benefits they *actually* provide (or the benefits *perceived* by e-marketplace customers). Because strategic positioning theory is directly concerned with the correspondence between companies' stated value propositions and their distinctive value activities, we now turn to our strategic positioning analysis.

¹ It should be noted, however, that integration benefits are not available through its public e-marketplace, but are instead available to enterprises that pay for its extended enterprise software and services. These customers may not be the same customers that participate in its public e-marketplace. This point is discussed further below.

	<p>Global Sources</p> <p>Communication:</p> <ul style="list-style-type: none"> • "Helping to make global merchandise trade more efficient and effective through integrated cataloging, messaging" • "provider of information to electronics engineers, exporters and executives throughout the Asian region." <p>Brokerage:</p> <ul style="list-style-type: none"> • "enabler of global merchandise trade" • "allows buyers to efficiently search for goods, either by product or geographic areas..." • "present suppliers' product and company information in a consistent, easily searchable manner..." • Suppliers get "direct access to more than 259,000 buyers worldwide including a wide selection from the world's largest buyers" • "Highly promoted to buyers worldwide" in "print media, on the internet and at trade shows" 	<p>Vertical Net</p> <p>Communication:</p> <ul style="list-style-type: none"> • "providing industry news and related product and service information." • "industry-specific comprehensive sources of information, interaction ." <p>Brokerage:</p> <ul style="list-style-type: none"> • "Buyers can find the information required to quickly locate, source and purchase products and services online." • "Suppliers are able to generate sales leads by showcasing products and services across multiple marketplaces to reach highly qualified buyers." • "easier for buyers to request supplier quotes and for suppliers to respond" <p>Integration (for VerticalNet Solutions):</p> <ul style="list-style-type: none"> • "Organizations can easily share information across business units, utilize supply chain data and conduct commerce with trading partners, .. providing demand, supplier and inventory visibility". • "Increase productivity by accelerating sourcing cycle through extending reach to suppliers, standardizing supplier bids, managing "purchasing communications"
<p>Value Proposition</p>	<p>Targets verticals in general merchandise and electronics sectors, and global buyers and export oriented suppliers</p> <ul style="list-style-type: none"> • Product verticals – 27 industry verticals, 7 sectors (electronics, computers, telecommunications, general merchandise, fashion) • Buyers and suppliers – large global buyers "that purchase in volume for resale" "International export suppliers" Mostly smaller, Asian (90%) suppliers 	<p>E-marketplaces target diverse product verticals and diverse buyer and supplier types</p> <ul style="list-style-type: none"> • Product verticals – 59 industry verticals in 14 sectors (electronics, communications, energy, utilities, financial services...) • Buyers and suppliers – "Corporate divisions and small and medium companies". No geographic focus specified <p>Marketplace and procurement software solutions targeted at large enterprises</p> <ul style="list-style-type: none"> • No specific industries specified • Industry alliances, independent net market makers and global 2000 enterprises
<p>Product-Market Focus</p>		

<p>Value Activities</p>	<p>Content:</p> <ul style="list-style-type: none"> • Daily news reports, industry news, product surveys, special reports, shipping schedules, inspection services, links to travel guide <p>Matchmaking:</p> <ul style="list-style-type: none"> • Listing of products and suppliers • Search by product, supplier, country • New product alerts for buyers • Supplier marketing websites (storefronts) supported by a “Private Supplier Catalog” content management tool • Request for Information (RFI) <p>Post-sale Transaction Automation:</p> <ul style="list-style-type: none"> • Private Buyer Catalog tool for large buyers to maintain personalized product and supplier information • Tools to support management of procurement document flow across departments in multiple languages and currencies <p>Logistical Facilitation:</p> <ul style="list-style-type: none"> • None <p>Collaboration Support:</p> <ul style="list-style-type: none"> • None <p>Other Activities:</p> <ul style="list-style-type: none"> • Services for suppliers to photograph products, set up catalogs, etc. • Website software • Monthly print trade magazines • Industry print news magazines • CD ROMs • Trade shows 	<p>Content:</p> <ul style="list-style-type: none"> • Industry newsletter, discussion forums, event calendars, free software <p>Matchmaking:</p> <ul style="list-style-type: none"> • Listing of products and suppliers • Online search • Supplier branded storefront • “Pavilion” storefront that allows large suppliers to aggregate information with its partner suppliers • RFQ/RFP <p>Post-sale Transaction Automation:</p> <ul style="list-style-type: none"> • Order management service allows buyer to place order online from supplier’s catalog • Supplier can serve entire order management cycle online <p>Logistical Facilitation:</p> <ul style="list-style-type: none"> • Partnerships with freight management, logistics, credit, payment and finance services to support online transactions <p>Collaboration Support:</p> <ul style="list-style-type: none"> • Seller’s catalogs with secure log-on for authorized buyers, and personalized prices for each buyer • Content management tools for suppliers to manage private extranets for communicating with customers and partners through a private resource hub <p>Other Activities (offered by the VerticalNet Solutions business unit)</p> <ul style="list-style-type: none"> • Licensing of software and services for <ul style="list-style-type: none"> ➢ RFQ, auctions/reserve auctions, structured negotiations ➢ Integration via content hub knowledge sharing among user groups ➢ Procurement portal for purchasing team efficiency and communications ➢ Execution and sourcing management for managing relationship with suppliers • Systems integration and customer training and support
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Table 4: Value Proposition, Product-Market Focus and Value Activities

V.2. Strategic Positioning and e-Marketplace Performance

The second research question, derived from strategic positioning theory, asks whether the simultaneous fit or consistency between e-marketplaces' stated value propositions, their product-market focus, and their distinctive value activities explains their performance. Companies with good fit are expected to outperform those with poor fit. In addition, strategic positioning theory suggests that the attempt to combine brokerage and integration effects may lead to lower performance, since they target different customer segments and different "network" types (e.g., hierarchies or markets). Brokerage effects, for example, are believed to work best to match previously unknown buyers and suppliers in a market-like arrangement. Integration effects, by contrast, work best to facilitate interaction between existing business partners in a hierarchical relationship. Thus, one expects that e-marketplaces pursuing either brokerage benefits alone or integration benefits alone would outperform those that try to do both. Trying to do both would be to avoid the hard choices that make for a good strategic position, according to Porter (2001).

V.2.1. Global Sources

Global Sources' value proposition centers on communication and brokerage benefits in global trade – providing the information and intermediary services to bring together buyers and suppliers who might otherwise have difficulty finding each other. (See Table 4 for details.) Although **Global**

Sources advertises products in many vertical industry segments, their products generally fall into two clusters – general merchandise and electronics from small, Asian suppliers – of interest to a limited number of buyer types – large Western retailers (e.g., JC Penny and Sears) and global OEMs and electronics products distributors (e.g., Compaq and Dell). Thus, **Global Sources** has a clear product-market focus. And, by matching large Western buyers and small Asian suppliers who would otherwise have difficulty finding each other, **Global Sources** performs a unique and valuable service.

Global Sources conducts a range of value activities that closely fit its value proposition of communication and brokerage between large Western retailers and OEMs and small Asian suppliers. The company's communication activities are extensive, befitting its 25-year history as a print catalog and magazine publisher. Its matchmaking services include online product catalogs ("electronic showrooms") that suppliers can customize to better feature their products, a request for information feature, and product alerts for buyers.

The **Global Sources** site does not support searching on price, nor does it actually enable fully automated online purchasing. (In 2000, the company began piloting online transaction capability.) However, the company does provide tools to enable large buyers to manage orders and information about relevant products and suppliers. And, since many small Asian suppliers have limited IT knowledge and skills, **Global Sources** helps them get online. The company has several hundred sales representatives who visit suppliers and, with the aid of

digital cameras and standard templates on their laptops, help suppliers to create and upload their product and company information. **Global Sources'** online services have largely remained faithful to the industry verticals traditionally served by the publishing company. Therefore, the company has been able to leverage its established reputation. In addition, the company's traditional print offerings and CD-ROMS continue to build the **Global Sources** brand and promote participation in the e-marketplace.

Overall, **Global Sources'** value proposition is a good fit with its product-market segments and also with its primary value activities. Its overall profile (Figure 2 top) is very close to the "pure" brokerage and communications gestalt (Figure 1 top). Its brokerage and communication value proposition aligns with its standard products, fragmented supplier base, and geographically remote buyers. The value proposition is also well aligned with its primary value activities of content management and matchmaking.

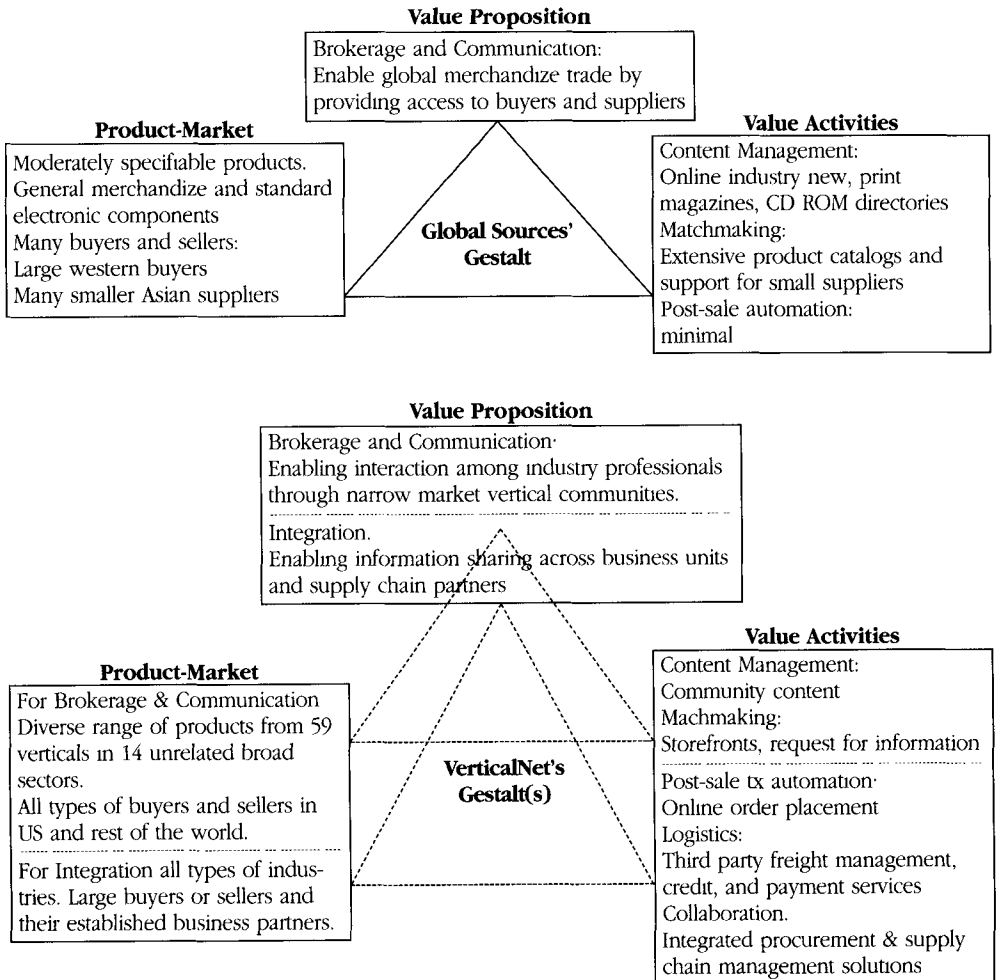


Figure 2: Gestalts of Global Sources and VerticalNet

V.2.2. VerticalNet

Compared to **Global Sources**, **VerticalNet** has a broader value proposition (emphasizing all three effect types) and indeed has two distinct value propositions, one for each of its two business units. (See Table 4 for details.) The e-marketplace business unit emphasizes the benefits of communication and brokerage, whereas the technology solutions unit emphasizes the benefits of integration.

VerticalNet's e-marketplace business unit has a solid set of content and matchmaking value activities that fit well with the value proposition of communication and brokerage. In addition, the company has put in place transaction automation tools and logistical services (in collaboration with partner companies) that support the entire purchasing process to a far greater extent than **Global Sources** has. Thus, the gestalt of **VerticalNet's e-marketplaces unit** is close to the communications and brokerage gestalt (Figure 1 top) also pursued by **Global Sources**.

But **VerticalNet's e-marketplace unit** does not have as clear a product-market focus as does **Global Sources'** for the same communication and brokerage value proposition. **VerticalNet's** strategy has been to build community by creating many narrow market verticals where industry professionals can interact. Its 59 verticals in 14 industry sectors (e.g., electronics, healthcare, wastewater, financial services, etc.) appeal to many types of buyers and suppliers with little overlap among them. Thus, attracting new customers to one vertical is unlikely to build business for the others, which is not the case for **Global Sources**.

VerticalNet's technology solutions unit pursues value activities appropriate to the integration value proposition. For example, the eXtended Enterprise Solutions unit markets, to large buyers, software to manage private extranets for communicating with *established* suppliers; it also markets, to suppliers, software that allows them to display *previously negotiated special prices to selected customers*. Thus, the gestalt of **VerticalNet's technology solutions unit** is close to the integration gestalt (Figure 1 bottom).

While each of these two business units appears to have internally consistent strategic positioning gestalts, the two gestalts are somewhat at odds with each other (Figure 2 bottom). The eXtended Enterprise software solutions business unit emphasizes integration benefits to customers who may not be the same as those for **VerticalNet's e-marketplaces**. Whereas **VerticalNet's e-marketplace business unit** competes (in the electronics vertical) with **Global Sources**, **VerticalNet's technology unit** competes with established marketplace and procurement software providers such as CommerceOne and Ariba. And, whereas the e-marketplace business unit attempts to bring together previously unknown business partners, the technology unit enables interaction among known business partners.

Overall, **VerticalNet** has two themes within its organization – brokerage and communication on the one hand and integration on the other, and this leads to a situation of dichotomous fit (Figure 2 bottom). There is reasonable fit among the elements of its e-marketplaces unit: its communication and brokerage value

proposition, its large numbers of buyers and sellers in multiple verticals, and its content management, matchmaking and post-sale automation value activities. There is also reasonable fit in its technology solutions unit: its integration value proposition, its focus on large buyers and sellers and their established partners, and its collaboration, post-sale automation and logistics activities. However, the fit across these two themes is poor, since they address different product-market segments and require very different value activities. This divergence in value activities could result in a loss of focus, leading to poor performance. And, indeed, **VerticalNet's** performance has been lower.

VI. DISCUSSION AND CONCLUSION

The phenomenon of e-marketplace success is of interest both theoretically and practically. Theoretically, electronic markets theory predicted a move toward electronic markets away from hierarchical business relations as a result of electronic interconnection benefits. Practically, companies must decide whether and how to invest and participate in e-marketplaces. The recent shakeout in electronic marketplaces has raised the salience of e-marketplace success and failure.

Number and types of interconnection benefits did not fare well as the sole factors in e-marketplace success in the contrasting cases of **Global Sources** and **VerticalNet**. **Vertical-**

Net, with its significant emphasis on integration benefits in addition to communication and brokerage benefits, has underperformed **Global Sources**, which only promotes communication and brokerage benefits. Nor can the performance difference be explained by divergence between *stated* value proposition and *actual* value proposition – our analysis of the fit between stated value propositions and observed value activities in the two companies suggests that both have the means to deliver what they promise.

Strategic position, however, does appear to provide a good explanation for the difference in e-marketplace performance. Strategic fit among value proposition, product-market segments, and value activities was examined. The higher performing e-marketplace, **Global Sources**, had good fit among the elements in these three categories. While **VerticalNet** had reasonably good fit within each of its two business units, the divergence between the two may explain its lower performance. Also the diversity of **VerticalNet's** product-market segments makes it difficult for that company to provide a tailored value proposition, and hence the fit within their e-marketplaces unit is not as strong as **Global Sources'**.

In general, then, strategic positioning theory appears to add considerable explanatory power to the emerging theory of electronic markets. The distinction in electronic markets theory among the communication, brokerage, and integration benefits types proved a useful way to differentiate e-marketplace value propositions. Strategic positioning theory provides the added value of focusing

attention on the gestalts of value proposition, product-market focus, and value activities.

In addition to these theoretical lessons, the **VerticalNet** case suggests some interesting practical lessons for electronic marketplaces. First, an overly broad targeting of product market segments does not confer strong strategic benefits for e-marketplaces. Any economies of scale resulting from a shared technology platform are offset by other disadvantages, such as the difficulty of crafting a distinctive value proposition that appeals to all product-market segments served or the lack of synergy for other vertical segments afforded by adding new customers and suppliers to a single narrow segment. The **VerticalNet** case also suggests it is difficult to support both brokerage and integration benefits simultaneously, as they appeal to different types of customers, and, perhaps more significantly, they require very different value activities to support. In recent years, much of **VerticalNet's** management attention and resources have been focused on acquiring the software and skills required for the integration value proposition, possibly detracting from efforts to improve e-marketplace performance.

Overall, this paper demonstrates the usefulness of strategic positioning theory in contributing to the explanation of the differential performance of e-marketplaces. Even when they appear to have similar strategies and value propositions, e-marketplaces can differ in the degree of fit between their value propositions, their product-market segments, and their value activities.

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