

**Entering the 21<sup>st</sup> Century:**

**Competition Policy in the World of  
B2B Electronic Marketplaces**

**A Report by the Federal Trade Commission Staff  
October 2000**

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## INTRODUCTION<sup>1</sup>

B2Bs are business-to-business electronic marketplaces that use the Internet to electronically connect businesses to each other. They have been characterized as the new business development most likely to transform how business is conducted in the twenty-first century. Largely unheard of only a few years ago, B2Bs are now estimated to handle billions of dollars in purchases,<sup>2</sup> and although it is difficult to gauge the reliability of such predictions, some estimate that the volume of commerce transacted through B2Bs will reach into the trillions of dollars over the next five years.<sup>3</sup>

Given the importance of this new business development, the Federal Trade Commission drew upon its unique mission “to study competition and work with the business community and others to detect new trends”<sup>4</sup> and hosted a B2B public workshop, “Competition Policy in the World of B2B Electronic Marketplaces,” on June 29 and 30, 2000.<sup>5</sup> Organized by staff of Policy Planning with input from more than 200 sources, the workshop included 65 panelists and had an attendance of over 600 people. Participants included entrepreneurs who have been operating or forming B2Bs and antitrust practitioners, economists, and legal scholars who have been working with or studying B2Bs. Approximately 30 statements were submitted in response to the FTC’s request for comments.<sup>6</sup>

Workshop participants characterized B2Bs as both the result of and contributing to larger trends in the economy that are already in progress, such as the advent of new technologies and the

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<sup>1</sup> This Report represents the views of the staff of the Federal Trade Commission; it does not necessarily reflect the Commission's views or the views of any individual Commissioner.

<sup>2</sup> Morgan Stanley Dean Witter (Stmt) 37. *See also* Salomon Smith Barney (Stmt) 77 (B2B stocks were worth approximately \$130 billion according to the report issued in January 2000).

<sup>3</sup> Morgan Stanley Dean Witter (Stmt) 37 (online B2B purchases will grow to \$1.4 trillion by 2002). *See also* Boeth (Stmt) 2 (Jupiter Communications predicts that “the nation’s online B2B revenues will reach over \$6 trillion by 2005 – a 20-fold increase in just five years”); Tarkoff 18 (“Gartner Group ... predicts that by the year 2004, there will be \$7.3 trillion worth of B2B e-commerce”); Kinney (Stmt) 2 (\$2.7 trillion by 2004, according to Forrester Research).

<sup>4</sup> *See* FTC Chairman Robert Pitofsky, “Remarks at B2B Electronic Marketplace Workshop,” June 29, 2000, *available at* [www.ftc.gov/bc/b2b/b2bpitofsky.htm](http://www.ftc.gov/bc/b2b/b2bpitofsky.htm) (last visited October 2, 2000). *See also* Federal Trade Commission Act of 1914, 15 U.S.C. § 6(a), 15 U.S.C. § 46(a).

<sup>5</sup> Materials from the workshop are available at [www.ftc.gov/bc/b2b/index.htm](http://www.ftc.gov/bc/b2b/index.htm).

<sup>6</sup> Workshop panelists and written submissions are listed in Appendices A and B, respectively.

increasing globalization of markets. The Internet technology that powers B2Bs is potentially transformative in that it can speed business-to-business communications into “real-time” transactions, conducted globally, with heightened accuracy and reduced waste, thus increasing the nation’s productivity.

This Staff Report seeks to summarize what was learned at the workshop and to lay the foundation for understanding how to answer traditional antitrust questions in the context of new B2B technology. The hope is that this foundation will facilitate further dialogue among antitrust officials, the B2B industry, antitrust practitioners, legal scholars, consumer groups, and other experts with an aim toward developing a common understanding of the types of B2B structures, rules, and practices that, in particular circumstances, are most likely to ensure both antitrust compliance and the efficiencies that B2Bs promise.

## EXECUTIVE SUMMARY

**Overview of B2B Electronic Marketplaces** Although treated as a group in this Staff Report, B2Bs are remarkably diverse. B2Bs serve a broad array of industries, from metals to fresh produce to hotels to chemicals to energy, with some B2Bs focusing horizontally (across various industries) and others vertically (on only one industry). Through B2Bs, participants buy and sell a wide variety of goods and services, from materials to be used in a firm's final product to things that just keep the firm running. B2Bs can be organized under a variety of ownership structures: some are founded by companies who use them; some are founded by third parties who do not plan to buy or sell through them; some are a blend of the two. Prices in B2Bs can likewise be established in various ways: by auction, catalog, a bid-ask system, or negotiation, for example. B2Bs may earn revenue from multiple sources, including transaction-related fees, membership fees, service fees, advertising and marketing fees, and sales of data and information. Market forces are continuing to sort out issues such as which, and how many, B2Bs will succeed, the extent to which potential efficiencies will be realized through B2Bs or instead through private networks, and the likely extent of interoperability among B2Bs.

**Efficiencies of B2B Electronic Marketplaces** B2B marketplaces have the potential to generate significant efficiencies, winning lower prices, improved quality and greater innovation for consumers. Many panelists stated that savings and increased competition through B2Bs could be substantial; indeed, one business analyst commented that, "[f]rom a very macro perspective, B2B e-commerce is simply the next generation of productivity growth for the U.S. economy."<sup>1</sup>

B2Bs can gain efficiencies in a variety of ways. B2Bs can reduce administrative costs, such as the time and energy a business expends to process an order and correct any mistakes in its processing. B2Bs can reduce search costs, that is, the costs buyers incur identifying suppliers and their offerings, and vice-versa. For example, B2Bs can make it easier for buyers to comparison-shop, replacing thumbing through bulky paper catalogs with quick and efficient mouseclick searching. Reduced search costs also mean that suppliers can have greater and cheaper access to more potential customers. Such reduced search costs can make new sales channels viable, creating markets for goods and services not traded before.

B2Bs can help check unmonitored corporate spending by using technology to enforce spending and other limits on in-house buyers. B2Bs can facilitate efficient joint purchasing, which may help reduce transaction and manufacturing costs and produce other cost-savings. B2Bs can be integrated with a firm's internal computer systems in order to continue reaping, and expanding upon, the benefits of the earlier computer-based systems. Enhanced efficiencies may also arise from increased collaboration facilitated by B2Bs, such as joint product design by the various firms involved in putting a product together. Finally, the heightened interaction between buyers and suppliers that B2Bs offer may facilitate supply chain management. That is, B2Bs could enable suppliers all along the supply chain, potentially reaching multiple tiers of suppliers, to learn more quickly what buyers want and when they want it, reducing forecasting that traditionally has proved inaccurate and expensive.

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<sup>1</sup> See Teagarden 100.

This is an impressive list. Although panelists noted that efficiencies may be more easily articulated than realized, the efficiencies that B2Bs may offer merit serious attention in light of their significant potential for cost savings and increased competition.

**Antitrust Analysis of B2B Electronic Marketplaces** B2Bs may raise a variety of antitrust issues. Workshop panelists reported, however, that the antitrust concerns that B2Bs may raise are not new and agreed that B2Bs are amenable to traditional antitrust analysis. Some panelists commented that, when antitrust concerns do arise, familiar safeguards may be sufficient to address those issues. Indeed, it appears likely that many potential concerns could be eliminated through well-crafted B2B operating rules. Consequently, the discussion that follows does not warn of insoluble problems, but rather lays the foundation for identifying and addressing circumstances that warrant antitrust scrutiny.<sup>2</sup>

Rather than address all potential issues, this Report focuses only on those issues that were discussed extensively at the workshop. The efficiencies and possible enhancements to competition that B2Bs can offer stem in part from their collaborative nature, but collaboration among firms also could facilitate anticompetitive conduct in two types of broadly defined markets: the markets for goods and services traded on B2Bs (or derived from those traded on B2Bs) at both the seller and the buyer levels, and the market for marketplaces themselves. In the market for goods and services, workshop panelists noted that competition may be affected by the extent to which information is shared and by whether joint purchasing or exclusionary (membership or access) practices are implemented. In the market for marketplaces, panelists suggested that exclusivity could affect the development of competition.

**Competition Issues in the Market for Goods and Services: Information-Sharing Agreements** The Internet allows firms to share information at an unprecedented rate. Depending on the operating rules, participants in a B2B could learn in real time, for example, the

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<sup>2</sup> To date, the Commission has reviewed only one B2B. See *In re Covisint, Inc.*, File No. 001 0127 (Sept. 11, 2000), *closing letter to General Motors Corp., Ford Motor Co., and DaimlerChrysler AG available at <[www.ftc.gov/os/2000/09/covisintchrysler.htm](http://www.ftc.gov/os/2000/09/covisintchrysler.htm)>* (last visited October 23, 2000). In its letter closing the investigation of whether the formation of Covisint violates Section 7 of the Clayton Act and terminating the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act, the Commission found no further action warranted at this time but stated as follows:

Because Covisint is in the early stages of its development and has not yet adopted bylaws, operating rules, or terms for participant access, because it is not yet operational, and in particular because it represents such a large share of the automobile market, we cannot say that implementation of the Covisint venture will not cause competitive concerns.

*Id.*

identities of the purchaser and seller in a transaction, the quantity purchased, the date and time of the transaction, and the purchase price. B2Bs capitalizing on that power can increase efficiencies in the supply chain and facilitate prompt competitive responses in the market, but they also might injure competition by facilitating price or other anticompetitive coordination. Workshop panelists also voiced concern about whether a B2B's operating rules would permit its participant-owners – particularly those with seats on the B2B's board of directors, or places in upper management of the B2B – access to sensitive data about their rivals.

The antitrust analysis of agreements to share competitively sensitive information would ask whether they might facilitate coordination on price or other terms. The analysis would examine the structure of the market that the B2B serves, including market concentration and the market shares of those sharing the information, whether the information was shared among competitors, the kind of information being shared, and the reasons for sharing. If a market is less susceptible to collusion, information-sharing through B2Bs generally poses fewer collusion risks. All other things equal, sharing information relating to purchases of direct goods may convey competitively sensitive information about a rival's business and, consequently, is more likely to raise antitrust issues than the sharing of information relating to indirect goods. Similarly, sharing contingent or future pricing information is generally more troubling than sharing information about past transactions, and sharing competitively sensitive information that is uniquely and readily found on the B2B is generally more likely to raise concern than sharing such information that can easily be found elsewhere. Panelists identified many possible mechanisms for handling these concerns, including erecting firewalls within the B2B, segmenting catalogs, and other measures.

**Joint Purchasing** Several panelists voiced concern that B2Bs, through operating rules, could allow the exercise of monopsony power. Monopsony is buyer-side market power that lets a buyer or buyer group drive down the purchase price of an input by buying less of it and, therefore, depress output. The concern arises most directly when a B2B could be used by a large buying group to coordinate the reduction of their purchases in order to lower price.

Panelists stressed the importance of asking whether the buyer group accounts for a sufficient share of the buying market such that reducing its purchases would likely depress the price of the inputs bought. They also emphasized that buyer groups driving prices down through monopsony power are not to be confused with buyer groups that get better prices through increased efficiencies, such as by savings to suppliers realized in sales to the group.

**Exclusionary Practices** Several panelists voiced concern about the potential for exclusionary operating rules, and the possibility that some B2Bs would discriminate against, if not overtly exclude, the rivals of its owner-participants. Panelists noted that exclusionary practices (such as presenting information on the screen in a way that favors the B2B's owners or using discriminatory operating rules to leave rivals with reduced functionality or higher costs) might raise rivals' costs of doing business and limit their ability to provide effective competition in markets for the goods that they sell.

Analysis of this issue would focus first on the extent of the disadvantage that rivals likely would experience if B2B access were denied or limited, taking account of any substitutes, such as offline markets, that could be used equally well to buy or sell the goods.<sup>3</sup> Several panelists suggested that strong network efficiencies in an established B2B might make alternatives significantly more costly and less competitive. The analysis would also inquire whether the effects on rivals' costs could be deterred or counteracted by entry of alternative marketplaces or by counter-strategies that rivals might pursue.

Next, the analysis would examine the likely impact on competition in the markets in which the excluded firms participate. If the excluded rivals were important to maintain effective downstream competition (*e.g.*, for finished products), exclusionary conduct that significantly raised their costs may cause anticompetitive harm. The analysis would consider factors such as downstream market concentration, theories of unilateral and coordinated anticompetitive effects in the downstream markets and downstream entry, as well as any unique competitive significance of the excluded firms. Finally, if anticompetitive harm were likely, the analysis would ask whether the exclusion was reasonably necessary to achieve procompetitive benefits that likely would offset the anticompetitive harm.

**Exclusivity Could Affect Competition Among Marketplaces** Several panelists expressed concern that a B2B might undermine the development of competition in the market for B2Bs (and any effective substitutes) by “over inclusion” of industry members or by improperly encouraging or requiring buyers or sellers to deal with it to the exclusion of other B2Bs. The antitrust inquiry would ask whether the exclusivity practices leave available sufficient buying, selling, or other support to sustain alternative marketplaces capable of maintaining competition. Indeed, to the extent that ownership interests yield incentives that result in *de facto* exclusivity or “over inclusion,” the antitrust inquiry would be structured in the same manner.

To capture business, a B2B may use a variety of incentives – such as promises of rebates, revenue-sharing, or profit interests for committing some amount of volume to the B2B – or restrictions, including rules imposing minimum volume or minimum percentage requirements, bans on investment in other B2Bs, or pressure on suppliers and buyers to urge them to trade on a particular B2B. Indeed, exclusivity practices could exacerbate potential effects from network or other scale economies that may make it difficult for an entrant to start small, attract the necessary volume, compete effectively, and grow to become a significant factor in the market.

If a B2B's overinclusiveness or exclusivity practices do not leave sufficient available support to sustain alternative B2Bs, exclusivity may cause anticompetitive harm. If harm appears likely, the analysis would ask about procompetitive benefits attributable to exclusivity.

Although inquiry into these issues is highly fact-intensive, some guideposts can be planted. All else held equal (including the ability to achieve efficiencies and innovations), competitive

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<sup>3</sup> “Goods” refers to services sold and purchased through B2Bs as well.

concerns are magnified (i) the greater the market share of the B2B participant-owners; (ii) the greater the restraints on participation outside the B2B; and (iii) the less the interoperability with other B2Bs. This does not mean that industry consortia B2Bs are presumptively unlawful or that minimum volume commitments cannot be imposed in many circumstances. It does suggest that high levels of industry ownership or substantial minimum purchase requirements will likely draw a closer look.

### **Conclusions and Themes for the Future**

B2Bs differ in many respects, which is not surprising, given the enormous variety of offline business commerce that B2Bs seek to move online. Structures, operating rules, and practices that may make good business sense in one set of market circumstances may prove costly and inefficient in other business settings. In carrying out its enforcement responsibilities, the FTC and industry will likely benefit from further dialogue about the types of B2B structures, operating rules, and practices that, in particular circumstances, are most likely to ensure both antitrust compliance and the efficiencies that B2Bs promise.

## PART 1

### OVERVIEW OF B2B ELECTRONIC MARKETPLACES

Part 1 discusses the contours of business-to-business commerce and how the Internet provides new avenues for that commerce. It then surveys several key aspects of B2B marketplaces, such as what inputs are traded, whether the B2B is organized vertically or horizontally, what pricing mechanisms are used, who owns or controls the B2B, and how revenue is generated. Last, Part 1 explores these and other factors within several contexts: information sharing; barriers to entry, network effects and intellectual property issues; and switching costs and marketplace interoperability.

#### A. Business-to-Business Commerce

At the outset, some definitions are in order. “Business-to-business commerce,” or industrial purchasing, refers to the many different types of interactions relating to the purchase and sale of goods and services between businesses.<sup>1</sup> Some estimate the total of business-to-business commerce as “more than 70% of the regular economy.”<sup>2</sup> Given the size of the U.S. economy, it is clear that even a small increase in efficiency for that 70% could have profound implications for businesses and consumers alike.

B2B electronic marketplaces (or “B2Bs,” for the purposes of this Staff Report) refers to transactions that occur online through the support of the Internet.<sup>3</sup> B2B electronic marketplaces, therefore, are “a distinct system of suppliers, distributors, commerce services providers, infrastructure providers and customers that use the Internet for communications and

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<sup>1</sup> B2C refers to business-to-consumer commerce and has been the subject of considerable attention in its own right. However, for instant purposes, B2C falls beyond the scope of this report. To the extent it was addressed by the participants, it was in the context of distinguishing B2B from B2C commerce, with some noting that B2B commerce can be even more complex. *See, e.g.,* Salomon Smith Barney (Stmt) (“Salomon Smith Barney (Stmt)” hereinafter refers to *B2B e\*commerce – A Vertical and Horizontal Perspective*, January 2000) 97-100; Bye (Stmt) 4-5. B2G refers to business-to-government commerce. B2G commerce is treated as a subset of B2B commerce in which one of the businesses is the government. *See infra* nn. 39-41 to Part 2 and accompanying text.

<sup>2</sup> Erick Schonfeld, *Corporations of the World, Unite!*, E-Company, June 2000, at 125.

<sup>3</sup> On its broadest level, “e-commerce” refers to “any trade or commercial transaction that is effected via electronic means; this would include such means as facsimile, telex, EDI, Internet, and the telephone.” Bye (Stmt) 4. This report adopts the more narrow and more common definition of “trade that actually takes place over the Internet.” *Id.*

transactions.”<sup>4</sup> Businesses typically engage in at least six “B2B” activities: they search, source, specify, negotiate/bid, order, and receive goods and services<sup>5</sup> that are needed in order to operate.<sup>6</sup> At the most basic level, B2B e-marketplaces essentially take one or more of those standard business processes and put them online. Eventually, businesses may be able to move other business interactions, such as joint product design, online as well.

## **B. Electronic Business Communication**

B2Bs are the latest step in the long evolution of business communication practices. The evolution of industrial purchasing has been one of constant, albeit sometimes uneven, incorporation of new technologies. Those technologies include, but are not limited to, the telephone, facsimile, various resource planning tools, electronic data interchange and, most recently, the Internet.<sup>7</sup> The Internet provides the next step in electronic communication, a step that many consider to be a quantum leap.

### **1. Legacy Systems**

The term “legacy systems” is generally used to refer to the systems for automating business-to-business commerce that preceded the Internet. It is helpful to understand them, both because they represent one baseline from which the efficiency gains attributable to Internet commerce may be measured, and because they are sometimes “back office” systems to which companies want their B2Bs linked. For the most part, these systems facilitate various communications about a firm’s input requirements. The advantages of automating input requirements become clear when one considers that many companies do high volumes of business, with products that use some common parts but also some unique parts and that each have varying production lead times.<sup>8</sup>

One such legacy system, materials requirements planning (“MRP”) is a complex software application that enables companies to more efficiently track what they need to purchase based on

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<sup>4</sup> Baker & McKenzie (Stmt) 3, n.3.

<sup>5</sup> Hereinafter, “goods” also includes “services.”

<sup>6</sup> Attanasio 98. *See also* Stewart 63; Morgan Stanley Dean Witter (Stmt) 27-32. A submission from the CPR Institute for Dispute Resolution stated that because “business disputes are inevitable,” dispute resolution is as much a part of the corporate procurement process as identifying needs and pricing. Henry (Stmt) 1. Therefore, it urges participants to use B2Bs also as a mechanism for planning to manage disputes. *Id.*

<sup>7</sup> Bye (Stmt) 4-5.

<sup>8</sup> Kinney (Stmt) A-2 - A-3.

their production schedules.<sup>9</sup> MRP can be understood as “a manufacturer’s cookbook.” It contains a “bill of materials” (“BOM”) that delineates which and how parts are needed to make the product. The BOM not only stores that general information but also breaks it down into parts and sub-assemblies. The MRP application integrates this information with information about production schedules to generate a firm’s “shopping list.” The MRP can be run, and therefore a new “shopping list” generated, as frequently as a business determines is necessary (e.g., daily, weekly, etc.).<sup>10</sup> Enterprise resource planning (“ERP”) systems are more advanced forms of MRPs, because in addition to managing the production of products, ERPs typically include human resource administration and financial accounting components.<sup>11</sup> For example, if a company’s financial system is integrated with its purchasing systems through an ERP, then when a purchase is made by a company employee, the finance department will be notified immediately.<sup>12</sup>

MRP and ERP systems can assist businesses in reducing the amount of time parts are held in inventory. Reducing this “lead-time” is often a central goal of businesses. Parts must arrive in sufficient time to meet production schedules, but also in a manner that minimizes inventory. If lead-time, and therefore inventory, could be reduced to zero, a business would be functioning on a build-to-order basis.<sup>13</sup> MRP and ERP systems can help businesses more accurately anticipate their input needs and thus reduce inventory lead-time. Their primary shortcoming is that their functioning is purely internal to the business which contains the system.

Yet another legacy system, electronic data interchange (“EDI”) expands upon MRP and ERP systems in that it permits buyers to convey their input needs directly to their suppliers. EDI provides computerized documents through which businesses can exchange the considerable information that business-to-business transactions require. Computerized transmission of input requirements between businesses via EDI marked a tremendous advance and resulted in considerable reduction in transaction costs for many participating firms.

While the ability of EDI to connect businesses is a valuable contribution, it comes at a very high price. EDI systems were originally built to use private computer networks, called “value added networks” (“VANS”).<sup>14</sup> These private networks required a substantial capital outlay both to implement and to maintain and, for that reason alone, many do not consider EDIs to be a

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<sup>9</sup> See, e.g., Kinney (Stmt) 4-5.

<sup>10</sup> *Id.* at A-1 - A-5.

<sup>11</sup> *Id.* at 5, n.6.

<sup>12</sup> Fromer 45-47.

<sup>13</sup> Kinney (Stmt) A-4.

<sup>14</sup> See *infra* at Part 1.A.2 (discussing EDI networks facilitated by the Internet).

“viable option for most businesses.”<sup>15</sup> Thus, although EDIs have been automating business-to-business transactions for more than a decade, primarily large firms have been the beneficiaries of their savings.<sup>16</sup>

Even for those businesses that could afford EDI systems, the underlying reliance on private networks resulted in significant constraints on the service that EDIs could provide. Some concluded that such EDIs do not provide market transparency or allow for market growth.<sup>17</sup> EDI supports a series of bilateral relationships rather than multilateral, dynamic relationships. Both the lack of transparency and market growth are largely attributable to the necessity of “establish[ing] an individual connection with every business partner.”<sup>18</sup>

## 2. Internet

The Internet makes B2Bs possible. It is an extremely efficient mechanism for the exchange of information in light of its pervasiveness and the ease of connectivity.<sup>19</sup> This type of connectivity is possible due in large part to extensible mark-up language (“XML”), which is the business-to-business e-commerce alphabet.<sup>20</sup> Through the Internet, businesses with differing MRP and ERP systems or computer hardware can access the universal browser without complex installations.<sup>21</sup> Small businesses unable to independently develop a viable e-commerce strategy could use B2Bs to “leverage a public infrastructure from someone else” to achieve its e-commerce goals.<sup>22</sup> In sum, “[t]he rapid and transformative growth of [B2B e-marketplaces] is attributable to the widespread adoption of the Internet, combined with new trading software and lower computing costs.”<sup>23</sup>

Internet technology affords sharing of “an unprecedented level of information about the complete activities of the customers in the marketplace” among sellers and buyers that participate

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<sup>15</sup> *E.g.*, Boeth (Stmt) 3.

<sup>16</sup> Harting (Stmt) 7. *See also* Fromer 48.

<sup>17</sup> *Id.*

<sup>18</sup> Fromer 37.

<sup>19</sup> *See, e.g.*, First 526; Harting (Stmt) 2.

<sup>20</sup> Teagarden 117-18.

<sup>21</sup> Kinney (Stmt) 29.

<sup>22</sup> Phillips 270. *See also* Tarkoff 19-20.

<sup>23</sup> Harting (Stmt) 7.

in any given B2B electronic marketplace.<sup>24</sup> Each transaction on the Internet can be tracked in great detail. Participants in any B2B can know, among other things, the identities of the purchaser and seller, the quantity purchased, the date and time of the transaction, and the number of times the specific purchaser looked at the product before making her decision.<sup>25</sup>

B2Bs can operate in conjunction with legacy systems. The integration of B2Bs with “back-offices” or “back ends” refers to linking the new technology with legacy systems so as to continue reaping, and expanding upon, the benefits of the earlier systems.<sup>26</sup> What this means as a practical matter is that the B2B can receive the information as it has been assembled by the legacy systems rather than necessitating separate completion of extensive B2B order screens, or vice versa.<sup>27</sup> For example, if a B2B and a company’s legacy system are integrated, and the B2B sends e-mails to the company regarding orders, the company will not have to “re-key” that information into its legacy system in order to process and fulfill it.<sup>28</sup>

And, in some cases, firms may not join B2Bs, but instead may use the Internet as a tool to improve existing proprietary networks. For example, with regard to EDI, it was noted that proprietary networks (facilitated by the Internet) will continue “where an individual manufacturer or purchaser continues to want to have its own vertical relationship with a host of suppliers as compared to [participation in a B2B].”<sup>29</sup> Even without EDI, a firm may consider whether it needs B2B participation to achieve desired cost savings, or whether it can achieve the same types of results by using the Internet to facilitate its own private network through which it maintains buy-sell relationships with suppliers and customers.

### C. B2Bs

Markets can assume as many forms online as they do offline. Each form may make more or less business sense depending on a multitude of factors, including the types of goods involved

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<sup>24</sup> Mirek 188.

<sup>25</sup> OESA (Stmt) 3.

<sup>26</sup> *See, e.g.,* Sullivan 252 (A “compelling reason” to join a B2B is to “leverag[e] the web technologies and ERP technologies out there to integrate into their back ends and improve their bottom lines”); Mirek 145 (Important to participation in B2Bs is their ability to provide “increased operational efficiencies, such as back-office integration.”)

<sup>27</sup> Kinney (Stmt) 5 & n.7.

<sup>28</sup> Morgan Stanley Dean Witter (Stmt) 81.

<sup>29</sup> Guerin-Calvert 433-34.

and the nature of the industry. Below is a brief survey of some important dimensions of B2Bs.<sup>30</sup>

## 1. Direct and Indirect Inputs

All of the goods purchased and sold in business-to-business commerce fall into one of two general categories – direct or indirect inputs. Direct inputs, or manufacturing inputs, are raw materials or components that will be used directly in the manufacturing process.<sup>31</sup> These materials will be used in the buyer’s final product or will be sold by a retailer. Examples of these would include the highly-engineered parts that a firm installs into the machinery it manufactures and the different chemicals that businesses may use for purposes as diverse as creating drugs or treating wood products. By contrast, indirect inputs, also known as operating inputs, are used for maintenance, repair, or operation (“MRO”) and do not become part of the finished product.<sup>32</sup> Examples of these would include items such as paper clips and janitorial services.

Direct inputs generally account for fewer transactions than do indirect purchases, but the dollar value of each transaction involving a direct good tends to be greater.<sup>33</sup> Moreover, direct material purchasing tends to be a specialized function, whereas the purchasing of indirect materials may be fairly widespread within an organization.<sup>34</sup> Manufacturing firms and retailers typically devote a relatively higher proportion of their spending to direct material than do other types of firms, such as financial service firms, which typically devote more of their spending to indirect materials.<sup>35</sup> Whether a purchase involves direct or indirect materials may have implications for the type of B2B solution that fits best.

## 2. Horizontal or Vertical Organization

B2Bs are often categorized as “horizontal” or “vertical.” “Horizontal” or “vertical”

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<sup>30</sup> Clark 363-64 (noting that generalizations across industries are difficult because different facts are typically implicated).

<sup>31</sup> Steve Kaplan and Mohanbir Sawhney, *E-Hubs: The New B2B Marketplaces*, Harv. Bus. Rev., May-June 2000, at 98.

<sup>32</sup> *Id.* at 98. *See also* Knight 250. Knight further subdivides MRO into white collar and blue collar. The former refers to indirect goods used in offices (e.g., paper clips), the latter refers to indirect goods used in factories (e.g., gloves, valves).

<sup>33</sup> Kinney (Stmt) 12.

<sup>34</sup> *Id.*

<sup>35</sup> *See, e.g.*, Kinney (Stmt) 8; Gray 160 (noting that among retailers approximately 25% is MRO-type spend and 70% tends to be spend for more complex goods).

organization refers, respectively, to whether the marketplace serves many different industries or a single industry. If the marketplace's "product focus" is not necessarily specialized in any one category but has considerable breadth, then it is usually considered a horizontal marketplace.<sup>36</sup> If the marketplace provides product expertise and in-depth content knowledge for an industry, reflecting an "orientation along many steps in the supply chain of one product category," then it is said to be organized vertically.<sup>37</sup>

Given the variety of their offerings, horizontal markets are often well-suited to sell indirect inputs or MROs, items that tend not to be industry specific. Vertical markets, by contrast, are well-suited to sell direct goods that are incorporated into the final product or offered for resale – items that tend to be industry specific. These categories are, however, by no means hard and fast. There are always exceptions. Among the early entrants to the B2B economy was a horizontal marketplace that specializes in conducting reverse auctions that often involve the sale of highly-engineered direct inputs. And vertical marketplaces may offer indirect, as well as direct goods, to the industry served.

### **3. Mechanisms for Establishing Prices of Purchases and Sales**

B2B e-marketplaces may offer one or more of several possible price determination mechanisms, with countless variations. This report will briefly address four: catalogs, auctions, exchanges, and negotiations.<sup>38</sup> The first, catalogs, is typically a fixed price mechanism; the remainder usually involve dynamic pricing. Through electronic B2Bs, each of these mechanisms may enhance the price transparency of the marketplace. The implications of increased price transparency for efficiencies will be addressed in Part 2, and its implications for antitrust concerns

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<sup>36</sup> Kinney (Stmt) 20.

<sup>37</sup> Additional organizational structures for marketplaces include "diagonal" marketplaces, which "support a specific type of buyer or a specific type of product category across multiple industries." Baker & McKenzie (Stmt) 5. For example, a diagonal marketplace might support the "purchase and sale of electricity, natural gas, and liquefied fuels in Latin American markets." *Id.* "Regional horizontal" marketplaces "serve[] a community's businesses and non-profit institutions of all kinds and sizes, capitalizing on local cohesiveness." Such a marketplace would focus on industries with an inherently regional focus and build upon their "standing in the community to create a marketplace that serves the unique needs of a wide range of regionally or locally focused entities . . . regardless of industry." energyLeader.com (Stmt) 6. Regional procurement markets could, for example, serve regionally focused entities such as utilities, hospitals, and universities. *Id.*

<sup>38</sup> Regardless of the specific mechanism for establishing price, transactions usually assume one of two forms: those made through short-term and long-term contracts. The former, also called a "spot market," encompasses ad hoc purchases such as those made to meet unanticipated needs. Lucking-Reiley 453. *See also* Dupont 267-68.

will be addressed in Part 3.

### **a. Catalog**

Some B2Bs use catalog aggregators, or “metacatalogs,” to normalize, or standardize, product data from multiple vendors so that buyers can easily compare it.<sup>39</sup> The Internet allows catalogs to present extensive product information to an extent never before readily available, including multimedia content such as photographs and videos.<sup>40</sup> Once online, the pricing in catalogs can be revised with relative ease.<sup>41</sup>

For example, equalFooting standardizes and aggregates the data of a half dozen of the top MRO distributors, as well as others such as office supplies distributors.<sup>42</sup> Another B2B, HotOfftheWire, provides a catalog of consumer goods targeted to small and midsize retail stores.<sup>43</sup> MetalSite, a B2B serving the metals industry, contains catalog purchasing as an option, although MetalSite’s founder characterized the purchasing requirements of the metals industry as not being entirely amenable to presentation through catalog.<sup>44</sup>

Purchases using a B2B electronic catalog often follow the following steps, examining in sequential order:

- “(i) a home page, allowing the buyer to choose from any of the following: the placement of a new order; tracking of an existing order; view of order history; and view detailed information of an order.
- (ii) the product catalog, where the buyer may search, for example, by

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<sup>39</sup> Morgan Stanley Dean Witter (*The B2B Internet Report: Collaborative Commerce*, April 2000) 315. *See also* Zaad (23-24) (characterizing the fact that a single B2B catalog may contain the catalog items from many suppliers as the “essence” of the entire system).

<sup>40</sup> Kinney 29.

<sup>41</sup> Morgan Stanley Dean Witter (Stmt) 30 (“Moving the catalog online makes it dynamic; suppliers don’t have to wait for the next printing of a paper catalog to change products and prices.”). *But see* OESA (Stmt) 7 (“If the procedures required to add a new product [to a uniform product catalogue used in a B2B] are sufficiently onerous, participants would be unlikely to invest in developing new products because there would effectively be no market for them.”).

<sup>42</sup> Kim 154-55.

<sup>43</sup> Sullivan 252.

<sup>44</sup> Stewart 55 (noting that metal is a “highly attribute-based product” that has to be defined and described), 66.

- manufacturer, name, product category and end-use category.
- (iii) a page showing the results of the buyer's search, including quantities and [prices; the buyer can then select the specific goods to be purchased] . . .
  - (iv) a 'shopping cart', displaying selected products, and allowing the buyer to modify quantities, shipment address, and billing location, and to delete the order.
  - (v) a price quote page, indicating the prices and shipping charges for the products in the 'shopping cart.'
  - (vi) confirmation of order."<sup>45</sup>

Workshop participants also pointed out that sellers can customize price lists to reflect agreements reached with specific buyers but ensure that those prices can be viewed only by the intended buyers. As one panelist said, negotiated prices are frequently viewed as a form of proprietary information. A buyer and seller may want to retain what is essentially a private relationship even though they have moved the relationship to a public infrastructure.<sup>46</sup>

The catalog as a pricing mechanism appears to be “[p]articularly appropriate for the sale of low-priced items bought frequently in small quantities.”<sup>47</sup> That is because these items are “too low-priced to justify negotiation.”<sup>48</sup> Thus, though the prices may be customized, they are usually fixed.<sup>49</sup> This is consistent with the fact that many of the workshop participants discussed their experiences with catalogs within the context of MROs.<sup>50</sup> There are no hard and fast divisions, however. One panelist discussed how companies had used auctions to establish the prices for indirect materials, which were then placed in catalogs for the specific buyer at the auction-

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<sup>45</sup> Baker & McKenzie (Stmt) 4-5. During the workshop, two demonstrations were given of catalog purchasing on a B2B e-marketplace. *See* Zaad (21-32); Fromer (42-47).

<sup>46</sup> Phillips 300. *See also* Verloop 380 (discussing catalog system with “active pricing” whereby seller can dictate who sees the pricing); Haines 379 (buyer can either select a “fairly broad view or the universal view of the catalog” which would permit comparative pricing or “filter” their view to something more narrow such as a brand-specific view); Stojka 381 (“private catalogs and private auctions are really what buyers and sellers want”).

<sup>47</sup> Baker & McKenzie (Stmt) 4-5. *See also* Kinney (Stmt) 9. *But see* Morgan Stanley Dean Witter (Stmt) 88 (noting that in much the same way prices can be customized, it is possible that customized products – which are typically direct goods – may become custom lines in catalogs).

<sup>48</sup> Morgan Stanley Dean Witter (Stmt) 28.

<sup>49</sup> *See, e.g.,* Morgan Stanley Dean Witter (Stmt) 28; Lucking-Reiley 437.

<sup>50</sup> *See, e.g.,* Arnold 151; Knight 250; Harting (Stmt) 17.

determined prices.<sup>51</sup>

## **b. Auction**

The various forms auctions can assume in the offline economy are being transplanted to the online economy. A forward auction, also known as a forward English auction, "let[s] multiple buyers bid competitively for products from individual suppliers."<sup>52</sup> Forward auctions are seller-driven auctions, with prices moving up as a result of bidding among the buyers.

A reverse English auction is a buyer-driven auction that lets multiple sellers bid competitively to provide product to individual buyers. Prices move down.<sup>53</sup> Preparation for a reverse auction usually takes the form of a buyer issuing a "request for quotation" in which product specifications and commercial terms are presented.<sup>54</sup> The buyer identifies which sellers it wants to participate in the auction. Within the context of direct inputs, depending on the importance of the seller's product as an input to the buyer's ultimate finished product, such prequalification may take on particular significance.<sup>55</sup> Suppliers prepare their bids and submit them during the auction itself, with the option to move their prices down as bidding proceeds. A reverse auction may be organized such that the lowest bid does not automatically win. A buyer may award the contract to a bidder quoting a higher price if the difference is worth it because of quality, location, or other such considerations.<sup>56</sup>

Auctions are "[p]articularly appropriate for items that are unique and differentiated but simple to describe and understand."<sup>57</sup> The good in question and the structure of the marketplace will invariably influence what form the auction should take. One critical question is what

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<sup>51</sup> Kinney 162.

<sup>52</sup> *Id.* An English auction is distinguishable from either a Dutch or Japanese auction. A Dutch auction involves "one seller and many buyers in which the auctioneer reduces the price (from a high starting point) until a bidder agrees to buy at that price." Morgan Stanley Dean Witter (*The B2B Internet Report: Collaborative Commerce*, April 2000) 315. In a Japanese auction, which also involves one seller and many buyers, the "auctioneer raises the price (from a low starting point) and buyers must bid at each price to stay in the auction." *Id.*

<sup>53</sup> *Id.* at 8. During the workshop, three demonstrations of reverse auction were given. *See generally* Kinney 81-91.

<sup>54</sup> Kinney 79.

<sup>55</sup> *Id.* at 80.

<sup>56</sup> *Id.* at 84.

<sup>57</sup> Baker & McKenzie (Stmt) 7.

information is to be shared, among whom, and for what purpose. For example, the format of different reverse auctions demonstrated during the workshop varied depending upon market concentration in the supply market. In a relatively unconcentrated market, the bidders could see the bids (which were labeled by aliases rather than business name).<sup>58</sup> In a more highly concentrated industry, the auction was conducted according to a rank bidding format.<sup>59</sup> The bidders could not see the current price being bid; instead, each could see its own bid and its rank. This was done to “limit the amount of feedback to prevent suppliers from learning enough to signal each other in the future.”<sup>60</sup>

### **c. Exchange**

An exchange is a "two-sided marketplace where buyers and suppliers negotiate prices, usually with a bid and ask system, and where prices move both up and down."<sup>61</sup> B2B exchanges are typified by anonymous, real-time matching of orders and quotes comparable to that which occurs on a traditional securities exchange. This pricing mechanism is ideal for commodities or commodity-like products. Such highly standardized products are traded constantly and may experience extreme volatility.<sup>62</sup> One workshop participant characterized B2B exchanges as no different than trading through “pits with the open outcry” such as the Chicago Board of Trade, except that “you do it over the electronic network.”<sup>63</sup> An example of such an exchange is Currenex, a currency exchange that links banks and corporations.<sup>64</sup>

### **d. Negotiations**

Negotiation refers to any number of arrangements, such as Requests for Proposals, whereby the B2B consolidates and compares information regarding specific requests, followed by negotiations between the potential participants to the transaction.

The process that Requests for Proposals frequently take is:

“(i) seller posts a profile or proposal.

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<sup>58</sup> Kinney 82.

<sup>59</sup> *Id.* at 88-90.

<sup>60</sup> *Id.* at 90.

<sup>61</sup> Baker & McKenzie (Stmt) 7.

<sup>62</sup> Harting (Stmt) 16-17.

<sup>63</sup> Allgaier 142.

<sup>64</sup> Mirek 140-41.

- (ii) buyer searches by requirements, and is shown all sellers with posted profiles or proposals meeting those requirements.
- (iii) buyer chooses a seller, and advises that seller of its requirements.
- (iv) seller, if interested, then responds to that buyer, and seller and buyer negotiate directly with each other.”<sup>65</sup>

#### 4. Ownership and Control

As with most other aspects of B2B marketplaces, a review of current ownership structures reveals both that they defy easy categorization and that they are continuing to evolve. On the most basic level, distinctions are typically drawn between ownership by industry participants, that is, the companies that plan to use the B2Bs, and ownership by non-industry participants, such as venture capitalists or technology firms. Within the context of industry participant ownership, further distinctions are drawn between whether it is a buyer-participant or seller-participant. Types of contributions each of these groups can make are relatively clear: buyers and sellers contribute liquidity, venture capitalists contribute funding, and technology firms contribute functionality.<sup>66</sup>

Ownership by non-industry participants or third-parties characterized many of the first entrants into B2B e-marketplaces.<sup>67</sup> Such marketplaces are sometimes referred to as “independent,” though that appellation is itself the source of considerable debate. Several panelists strongly endorsed this third-party model as being essential to providing a fair and neutral marketplace.<sup>68</sup> For example, one panelist asserted that a third-party has “a natural incentive to maximize the profitability of the exchange, which means satisfying both the demand and supply side requirements.”<sup>69</sup> Other workshop participants rejected that premise, insisting instead that any marketplace has the incentive to act fairly and neutrally, since that is the best way to encourage broad participation in the marketplace.<sup>70</sup>

At the other end of the spectrum from third-party B2Bs are consortium B2Bs. Such B2B marketplaces, also termed coalition markets,<sup>71</sup> are founded and owned (at least in part) by

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<sup>65</sup> Baker & McKenzie (Stmt) 6.

<sup>66</sup> Harting (Stmt) 8.

<sup>67</sup> *Id.*

<sup>68</sup> *See, e.g.,* Mirek 172; IPPN (Stmt) 1; Kim 197-98.

<sup>69</sup> Mirek 190.

<sup>70</sup> *See, e.g.,* Gray 204; Walsh 366-67; Strojka 364-65.

<sup>71</sup> Clark 362.

industry-participants; they most often are either buyer-led or supplier-led but may include both buyers and sellers. Some argue that such ownership interests are essential for the success of a B2B. According to that argument, ownership by industry participants is essential both because they can support, financially and otherwise, development of the infrastructure, software, databases, and functionality that e-marketplaces require, and because their involvement guarantees that they will use the B2B for a sufficient volume of transactions to ensure the B2B's liquidity.<sup>72</sup> Such arguments were questioned.<sup>73</sup>

Falling between these two extremes are any number of ownership structures.<sup>74</sup> For example, some B2B marketplaces are owned in part by buyer-participants.<sup>75</sup> Still others are owned in part by seller-participants.<sup>76</sup> Some B2Bs have ownership by both buyer and seller-participants.<sup>77</sup> Some B2Bs recognize the possibility that their policy regarding equity holders could change. For example, BuyProduce has turned down requests from industry participants to hold equity.<sup>78</sup>

A concept closely related to ownership is that of control. Control, whether understood in terms of board membership or operational, day-to-day management, is typically related to ownership. However, some B2Bs are adopting strategies that separate control from ownership to

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<sup>72</sup> See, e.g., van Breen 191, 207; Spradlin 316-17; Gray 208.

<sup>73</sup> See, e.g., Brodley 575-76 (described the argument that B2Bs require groups with market power, especially as it pertains to raising capital, as not being "very convincing"); Kinney 211-12 (questioned, "Why do you need to be working in an exchange that's . . . explicitly co-owned with you and some of your horizontal competitors in order to do what you've been able to privately for years?"). See also Foer (Stmt) 1 (characterizing the motivation behind established companies to create consortium B2Bs as "reduc[ing] or eliminat[ing] the possibility that their industry will be served online by independent start-up[s]").

<sup>74</sup> See, e.g., Spradlin 314-15.

<sup>75</sup> Haines 349-50. (Buyer-participants hold equity in FacilityPro, but FacilityPro has turned down sellers who wish to buy equity in it. While she believes that active participation of both buyers and sellers is "one of the characteristics of a successful marketplace," she also believes that "it would be difficult to have equity participation on both sides." *Id.*)

<sup>76</sup> VerticalNet's [paintandcoatings.com](http://paintandcoatings.com) is a joint venture with Eastman Chemical Co. where Eastman (Walsh 352) also acts as a supplier on the B2B. See [www.paintandcoatings.com/content/homepage/default.asp](http://www.paintandcoatings.com/content/homepage/default.asp) (last visited October 18, 2000).

<sup>77</sup> See, e.g., Roberts 355-56.

<sup>78</sup> Verloop 345-46 (noting, however, that "[t]hat's not to say in the future that [BuyProduce] won't come up with some type of a [participant-owner] model").

some degree. For example, one consortium B2B is creating its management team “from mostly companies who are not part of those ownership companies.”<sup>79</sup>

## **5. Revenue**

B2Bs may compensate owners and operators, and potentially even participants, from a variety of sources, including transaction-related fees, membership fees, service fees, advertising and marketing fees, and fees for data or information. Moreover, many predicted that a B2B’s reliance on any particular revenue source may change as the B2B market matures.<sup>80</sup>

### **a. Transaction-Related Fees**

Transaction-related fees, or trading fees, may be charged per transaction, as a flat fee for a set number of transactions, on the basis of transaction value, or as a percentage of savings resulting from the trade. Whether the buyer or the seller is likely to pay the fees depends on the circumstances. Likewise, the size of the fee may vary among industries. “The most frequently traded and highly standardized goods, such as energy and petrochemicals, are associated with the lowest transaction fees.”<sup>81</sup>

One panelist noted that although transaction fees are currently the major source of revenue for his B2B, these fees will likely disappear: “Transaction fees will become like email, it will be free eventually.”<sup>82</sup> Another participant agreed that, as B2B marketplaces become more competitive, the competition will push transaction-related fees “towards zero.”<sup>83</sup>

### **b. Membership Fees**

Membership fees, or subscription fees, are typically paid up front or at certain intervals (e.g. annually) to participate on a marketplace. A membership fee may function as a type of sunk cost and, as such, may have implications for switching costs.

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<sup>79</sup> Gray 361.

<sup>80</sup> *See, e.g.*, energyLeader (Stmt) 7-8; Harting (Stmt) 19-20; Morgan Stanley Dean Witter (Stmt) 40-1.

<sup>81</sup> Harting (Stmt) 4.

<sup>82</sup> Verloop 420-21.

<sup>83</sup> Clark 419-20.

### c. Service Fees

Service fees are fees for additional functionality that B2Bs may offer either directly or indirectly. Value-added services that B2Bs are offering include logistics (e.g. shipping services); systems integration (e.g. coordinating legacy systems with B2Bs); financial services (e.g. credit assessments); and industry information (e.g. identification of new products and services, various trade-industry events, links to useful sites, news feeds pertaining to the industry, chat rooms).<sup>84</sup> B2Bs may provide value-added services themselves, or may receive a portion of the fee collected by third parties that the B2B permits to supply services through its e-marketplace. Several panelists asserted that service fees for value-added services will dominate over membership and transaction fees as the primary source of significant revenue.<sup>85</sup>

### d. Advertising and Marketing Fees

Advertising on B2Bs can take many forms including “banner advertising” or “opt-in e-mail marketing.”<sup>86</sup> The value of such advertising stems from the ability to target key purchasing decision-makers. B2Bs, like trade publishing, trade shows, and trade conferences, represent a means to achieve such targeted marketing. As one panelist explained, “there are really only about 100,000 buyers and [suppliers] in the pollution control business domestically, for instance, and we get about 30 to 60 percent of them in a given month to come multiple times to our site to get information, [so] we sell access to those eyeballs . . . [T]here are very robust revenue streams in advertising and promotion.”<sup>87</sup> A related revenue source is “listing (or hosting) fees,” which suppliers typically pay “to have a storefront” (a separate, supplier-specific segment) within a given marketplace.<sup>88</sup>

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<sup>84</sup> Harting (Stmt) 9-10.

<sup>85</sup> *See, e.g.*, Harting (Stmt) 4; Verloop 420.

<sup>86</sup> Baker & McKenzie (Stmt) 13. Opt-in e-mail marketing refers to “sending e-mail messages to those who have opted to receive them.” *Id.* One panelist noted that her customers, small businesses, are extremely concerned about online privacy. Buyers on her B2Bs do not want to be deluged with junk mail from suppliers who received information about the buyer from the exchange. Kim 182. Another panelist, also characterizing this as a consumer privacy issue, noted that “in a lot of respects it would be nice to get more targeted advertisements.” Knoll 182.

<sup>87</sup> Walsh 421-22.

<sup>88</sup> Baker & McKenzie (Stmt) 13.

**e. Data or Information Sales**

The accumulation of composite transaction or other market data by B2Bs was viewed as having tremendous value. Historically, such data typically would only have been available through sources such as vendors, competitors,<sup>89</sup> or middlemen. Now, if a B2B had adequate liquidity, it could accumulate detailed data regarding many aspects of particular chains of commerce. In theory, the data might be sold in aggregate form.<sup>90</sup> As one panelist noted, the information gathered at the B2B in the course of transacting millions of transactions may yield “overall statistics” that could be extremely valuable.<sup>91</sup> As an example, he noted that pipe mills “make or break themselves by knowing when to run their mill.”<sup>92</sup> If there were an annual auction for blocks of mill space, and if that information were accumulated over time, it would be of immense value to buyers and suppliers of mill space, as well as potential third parties seeking to offer additional services, because each of those entities could plan its activities more efficiently.<sup>93</sup>

Another example involved a B2B functioning as an intermediary between chain restaurants and food distributors; the B2B takes orders from the restaurants and then “shoot[s] them out to the right distributors.”<sup>94</sup> The B2B is then positioned to determine different buyers’ preferences, repackage that information (which necessarily involves aggregation), and sell it to the food manufacturers. The manufacturers then have better information on how to improve their products.<sup>95</sup> One specific example of current data sales involves European flower markets. A B2B accumulates sales price data for each flower on a daily basis and sells that information to a wire service, which makes it available internationally.<sup>96</sup>

Despite reservations about sharing individual transaction data, many buyers suggested that they would share aggregate data among various buyers. For example, Petrocosm offers aggregate buyer information to other buyers only if the contractual relationship between the participant and

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<sup>89</sup> Morgan Stanley Dean Witter (Stmt) 101.

<sup>90</sup> *Id.*

<sup>91</sup> Gray 230.

<sup>92</sup> *Id.* at 229-30.

<sup>93</sup> *Id.*

<sup>94</sup> Clark 402.

<sup>95</sup> *Id.* See also, Morgan Stanley Dean Witter (Stmt) 101.

<sup>96</sup> Clark 401-02.

marketplace allows the sharing of aggregated data.<sup>97</sup> Likewise, information about buyers is aggregated and shared among buyers at FacilityPro.com.<sup>98</sup> In the B2B electronic marketplaces designed by energyLeader.com, “data may . . . be aggregated by marketplace personnel in a manner that does not reveal any one buyer’s activities, e.g., for purposes of negotiating volume discounts.”<sup>99</sup>

One panelist noted that companies consider “their transactional record[s] as part of their trade secrets, as part of their proprietary intellectual property.”<sup>100</sup> Accordingly, it is necessary for B2Bs to address whether they are “custodians” of the data or “owners” of the data.<sup>101</sup>

## 6. Access to Information

Information on specific and aggregate transactions, supplier prices, buyer purchases, and other confidential or proprietary information could potentially be accessed by a B2B’s participants, owners, management team, employees, or board of directors. Many workshop panelists suggested that each marketplace handles issues of information sharing differently, and that typically either the board of directors or management decides how to use this information.<sup>102</sup> Other panelists observed that a marketplace’s operating rules may control how information is used,<sup>103</sup> or the contractual arrangement that each participant has with the marketplace may govern the confidentiality of transaction data or other proprietary information.<sup>104</sup> Thus, whether participants, owners, management, employees, or the board of directors has access to confidential or proprietary information depends on the B2B marketplace’s rules on how information is shared or secured.<sup>105</sup>

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<sup>97</sup> Gray 400.

<sup>98</sup> Haines 380.

<sup>99</sup> energyLeader (Stmt) 11.

<sup>100</sup> Chen 235-36.

<sup>101</sup> *Id.* at 236.

<sup>102</sup> Mirek 234-35.

<sup>103</sup> Gray 204.

<sup>104</sup> Gray 383.

<sup>105</sup> Practices vary. *See, e.g.*, Stojka 381-83 (in Commerx, in which strategic investors are limited to one percent ownership interests, detailed information may be available to management and board members, but an unwritten rule prevents the information from flowing to participant-owners); Gray 361-62 (in Petrocosm, an industry-owned consortium marketplace, the board and

Some panelists suggested that whether a marketplace's owners or managers should access buyer and supplier transaction data would depend upon who owned the marketplace. For example, in theory, seller owners and managers could receive an "unprecedented level of information about the complete activities of the customers in the marketplace" – whether the seller participates in a given transaction or not.<sup>106</sup> These owners could have an "unprecedented ability to monitor prices in realtime" – they would know each other's bids and prices instantly.<sup>107</sup> One of the dangers that could arise from a marketplace led by a coalition of sellers would be for the owners to "frontrun" the market, *i.e.*, discover buyers' confidential needs and raise the price accordingly. For example, if a B2B allowed sellers to know that a buyer will need "a certain large barge of chemicals within one week . . . instantly the prices of that chemical will go up 25 to 30 percent."<sup>108</sup> This could occur if the sellers were to have access to real-time and macro-level information (*e.g.*, customer trading patterns, pricing or demand trends) that provided them with extensive information regarding each other's pricing.<sup>109</sup>

With respect to sharing information among B2B participants, some workshop panelists suggested that if participants become concerned that too much information is shared, the market will quickly self-correct.<sup>110</sup> Others were more skeptical regarding the prospects for self-correction.<sup>111</sup>

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management will not have access to participants' proprietary information); Roberts 384 (announcing plans to bar M-Xchange's board of directors from receiving proprietary information from the exchange).

<sup>106</sup> Mirek 188.

<sup>107</sup> *Id.* at 199-200.

<sup>108</sup> Shridharani 185; *see also* Mirek 188.

<sup>109</sup> Currenex (Stmt) 2.

<sup>110</sup> *See, e.g.*, Walsh 385-86 (If a particular B2B marketplace allows too much information to be shared and "unduly harms the buyer, or if . . . the buyers share too much information and unduly hammer down the prices of the seller," the problem will self-correct at the "Internet's speed," much faster than the problems in "real world" economies that take "years and sometimes decades to correct."); Verloop 393 (the Internet punishes a B2B "doing unfair pricing practices" faster, making for "a self-correcting marketplace overnight rather than having to wait a couple of months"); energyLeader (Stmt) 10 ("The B2B world is an increasingly competitive one in which credibility is important, and in which news of unfair practices will travel quickly, with devastating consequences to the practitioner.").

<sup>111</sup> Foer 566 (conflicting information regarding whether self-correction is unusually rapid and can be counted upon). *See also* Ernst & Young (Stmt) 1-2 (based on its understanding of B2B participant concerns, advocating adoption of comprehensive public standards regarding the

## 7. Barriers to Entry, Network Effects, and Intellectual Property Issues

Many workshop panelists noted that B2B electronic marketplaces are proliferating now at a rapid pace.<sup>112</sup> One industry analyst expects to see 2,000 marketplaces by the end of 2000 and 5,000 by the end of 2002.<sup>113</sup> This rapid pace, however is not expected to last, as the industry moves into a phase in which various B2B electronic marketplaces will consolidate and differentiate.<sup>114</sup> Industry analysts offered varying opinions as to how far consolidation would ultimately reach.<sup>115</sup>

Other workshop panelists predicted that although marketplaces eventually will consolidate, there will be many segments and tiers within any specific industry,<sup>116</sup> and that there will be many niche players within each industry.<sup>117</sup> Moreover, if there is interoperability among marketplaces so that buyers and sellers conduct transactions not only within any one B2B but across multiple B2Bs (also known as exchange-to-exchange commerce), there is a possibility that there will be specialists competing for business from a number of marketplaces.<sup>118</sup>

The course of development will be greatly affected by the extent of entry barriers into the market for B2B marketplaces. One workshop panelist stated that B2B electronic marketplaces are proliferating now because barriers to entry are low, thus enabling multiple marketplaces to emerge.<sup>119</sup> Another suggested that if a start-up B2B offers only limited functionality, such as catalog purchasing or auction capabilities, it does not take much transaction volume or liquidity

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control of competitive information within B2Bs).

<sup>112</sup> See, e.g., Gray 412; Jasinowski 556; Rule 561-62.

<sup>113</sup> Morgan Stanley Dean Witter (Stmt) 17.

<sup>114</sup> See, e.g., Shridharani 214 (economies of scale and network effects drive consolidation).

<sup>115</sup> Compare Harting 415 (suggesting there will be two B2B electronic marketplaces within each relevant product market and relevant geographic market) with Gray 414 (suggesting the number would be five).

<sup>116</sup> Shridharani 214.

<sup>117</sup> Gray 213.

<sup>118</sup> Kinney 209.

<sup>119</sup> Harting (Stmt) 21.

for that marketplace to become competitive.<sup>120</sup> And one commentator noted that start-up costs for B2Bs with “basic functions” are falling as more standardized software becomes available, and that outsourcing infrastructure to a technology provider can make it possible to “get up and running fairly quickly” because barriers to entry are low.<sup>121</sup>

On the other hand, testimony by a number of panelists suggested that barriers to entry are getting higher as additional B2B electronic marketplaces become operational and begin to offer more complex services. Many of the workshop panelists emphasized that the most important requisite for the survival of a B2B marketplace is to have sufficient transaction volume.<sup>122</sup> Transaction volume – or liquidity – is necessary for the marketplace to cover its operating and developmental costs,<sup>123</sup> and it is best accomplished by attracting additional participants to the marketplace.<sup>124</sup> In addition, volume or liquidity drives down transaction costs, which then attracts additional participants.<sup>125</sup> And once the marketplaces have volume, panelists predicted, they will begin to compete on the basis of additional supply chain services.<sup>126</sup>

Moreover, many panelists suggested that the development of multiple marketplaces serving any one industry will be affected by the nature and magnitude of network effects<sup>127</sup> in each particular industry. One panelist observed that in B2B marketplaces, network effects are present where the more buyers there are in a particular marketplace, the more likely any given seller will be able to find a buyer and get a good price, and likewise for buyers being able to

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<sup>120</sup> Gray 413.

<sup>121</sup> Morgan Stanley Dean Witter (Stmt) 41, 74, 77.

<sup>122</sup> *See, e.g.*, Mashinsky 294 (marketplaces want as many buyers as possible); Gray 208 (transaction volume (or “spend”) of \$10 billion is necessary to pay for the creation of the infrastructure); Kinney 209 (a breakeven transaction volume of \$6 billion may be possible).

<sup>123</sup> van Breen 191.

<sup>124</sup> *See, e.g.*, Dupont 317, Gray 344 (“To accomplish getting more volume through the system, you have to have more participants.”).

<sup>125</sup> Arnold 220.

<sup>126</sup> Parker 431-32; Glover 445.

<sup>127</sup> Network externalities, or network effects, are present to “[w]hen the value of a product to one user depends on how many other users there are.” Carl Shapiro & Hal R. Varian, *Information Rules* (Harv. Bus. Sch. 1999) 13.

purchase necessary goods and services with more sellers in the marketplace.<sup>128</sup> To the extent that network effects create significant advantages for large incumbent B2Bs, entry could be impeded.

One commentator observed that independent B2Bs are finding it harder to locate necessary capital when an industry consortium forms a B2B aimed at the same market the independent B2B plans to serve. Suppliers of venture capital tend to assume that the industry coalition model will capture the liquidity necessary for a successful marketplace.<sup>129</sup> In addition, some panelists indicated that antitrust laws that vary from country to country can amount to an entry barrier for B2B marketplaces, which conduct business without respect to national boundaries.<sup>130</sup>

#### **a. Incentives Used to Attract and Retain Volume**

One panelist suggested that industry ownership provides both economies of scale and economies of know how and information,<sup>131</sup> and workshop panelists observed more generally that many marketplaces have offered equity investments to leading buyers or suppliers to generate critical mass in a marketplace.<sup>132</sup> Indeed, the CEO of Metalsite suggested that having industry ownership is one of the reasons why the marketplace is still operational.<sup>133</sup> The equity can be offered in exchange for market participants' commitment to provide a certain level of volume.<sup>134</sup> Others workshop panelists asserted that offering equity to marketplace participants appears to occur in markets that are concentrated with fewer buyers and sellers, rather than in markets that

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<sup>128</sup> Sunder 427. *See also* Rule 559 (network effects are present in that information provided by these marketplaces will be more valuable and accurate with a larger number of buyers and sellers); Guerin-Calvert 433; energyLeader (Stmt) 12-13 (“The attractiveness of the marketplace to the seller is often a function of the extent to which the marketplace is used by the seller’s major buyers. . . . Sellers who wish to continue their relationships with these buyers will want to participate in the marketplace.”).

<sup>129</sup> Clark 363. Nonetheless consortium B2B marketplaces could fail if long-time competitors find it difficult to work together. *Id.*; *see also* Heymann 368-69.

<sup>130</sup> *See, e.g.*, Krattenmaker 578; *cf.* Foy (Stmt) 2-6.

<sup>131</sup> Krattenmaker 546.

<sup>132</sup> Kafka 222-23 (equity gives incentive to use the exchange and thereby generate critical mass); Gray 225 (giving equity one way to drive for liquidity).

<sup>133</sup> Stewart 70.

<sup>134</sup> Kafka 219.

are fragmented and in which there are more buyers and sellers.<sup>135</sup>

In addition to equity, other workshop panelists suggested that other ways to entice volume to a marketplace are to provide volume discounts to incentivize buyers and suppliers to use a marketplace,<sup>136</sup> to establish rebates or revenue-sharing devices in return for commitments to achieve certain volume levels,<sup>137</sup> or to present information that highlights a particular marketplace participant.<sup>138</sup> On this last point, one workshop participant disagreed and suggested that information presentation does not account for much given the transparent and self-correcting nature of these marketplaces.<sup>139</sup>

### **b. Requirements Used to Obtain and Retain Volume**

Several workshop panelists suggested that “contractual coercion” might be used to require market participants to participate in a certain marketplace.<sup>140</sup> For example, one workshop participant suggested that some marketplaces are prohibiting their investors from making equity investments in or forming other B2B marketplaces, although such marketplaces are not prohibiting the investors from buying through other marketplaces.<sup>141</sup> Others suggested that minimum volume commitments or minimum percentage requirements could be used.<sup>142</sup>

Other panelists suggested that “benign coercion” was being used to “encourage”

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<sup>135</sup> Shridharani 224 (equity seeds liquidity in a concentrated market, not so much if a fragmented market); Harting 348 (big buyers and sellers get equity in order to induce liquidity in concentrated markets).

<sup>136</sup> *See, e.g.*, Gray 225, energyLeader (Stmt) 12 (“energyLeader.com may offer incentives to encourage entities to bring a large volume of transactions to the market.”).

<sup>137</sup> Kinney 220-21 (price based on a “blanket dollar commitment”); Foer (Stmt) 2.

<sup>138</sup> Kafka 195; Walsh 366 (Sabre system provides an example of information presentation issue).

<sup>139</sup> Harting 372.

<sup>140</sup> *See, e.g.*, Simkins 409-10 (contractual provisions or other exclusivity practices may be used that limit participants' flexibility and prevent them from "go[ing] where their best economic judgment dictates that they should go").

<sup>141</sup> Perlman 567-68.

<sup>142</sup> *See, e.g.*, Cooper 571.

participation in various marketplaces.<sup>143</sup> Indeed, one panelist stated that the pressure on buyers and sellers to participate in marketplaces when large players have affiliated on the other side of the transaction contained an “element . . . of intimidation.”<sup>144</sup>

On the other hand, some panelists suggested that it is unnecessary to use or require exclusivity to attract volume and that exclusivity is not required in many marketplaces.<sup>145</sup> Others suggested that many buyers want to use more than one marketplace,<sup>146</sup> and that exclusivity is not imposed on sellers because buyers want a choice of brands in a fragmented market.<sup>147</sup> In addition, some panelists suggested that exclusivity is used only for small portions of volume or for a limited period of time.<sup>148</sup>

### c. Intellectual Property Issues

Several panelists indicated that the development of multiple B2Bs serving any one industry could also be affected by how intellectual property issues are handled. For example, the same transparency that enables a company to sell its product faster could possibly enable a competitor to “understand how I make a product that differentiates [my product from other products] . . . and giv[es me] a market lead.”<sup>149</sup> Thus, the first question of many suppliers is will they lose their intellectual property through participation on a B2B?<sup>150</sup> Within the context of a concentrated market, one panelist noted that suppliers also provide a marketplace with “pretty valuable

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<sup>143</sup> See, e.g., Knoll 281 (“benign coercion” used by customers to force sellers to participate in a marketplace); OESA (Stmt) 6 (buyers could force not just suppliers, but suppliers’ suppliers, to join a marketplace).

<sup>144</sup> Shridharani 215-16.

<sup>145</sup> Mashinsky 294 (Arbinet does not require exclusivity, if exchange offers good value, exclusivity not needed); Dupont 302 (exclusivity is not required); and Loevy 304 (exclusivity is rare).

<sup>146</sup> Allgaier 217-18 (participants want to use different exchanges for different purposes or purchases); Kafka 219.

<sup>147</sup> Sullivan 298.

<sup>148</sup> Kinney 220-21 (minimum commitments have been small in percentage terms); Shridharani 224 (exclusivity used for small portions for given periods; not a major issue); Perlman 568.

<sup>149</sup> Attansio 109.

<sup>150</sup> *Id.* at 110.

intellectual property, drawings [and databases,] for example.”<sup>151</sup> Given that, the panelist then queried why the business would want to participate unless the business also has a capital interest.<sup>152</sup>

Another panelist stated that the impact of shop-bots on market transparency will be unclear until the intellectual property issues are “sorted out.”<sup>153</sup> Shop-bots are “metasearch engines” that enable one to search multiple auction sites concurrently. The network effects any one auction site enjoys would be less if sellers can post their products on any number of sites and buyers can have ready access to them.

Analogous issues are being litigated in the B2C e-commerce context where consumer auction giant eBay and auction aggregator Bidder’s Edge have been involved in litigation over the extent to which Bidder’s Edge can use software programs to cull the listings of eBay, similar to the manner in which search engines operate.<sup>154</sup> The role of intellectual property protections has also been raised within the context of commodities exchanges. One panelist noted that the NASDAQ is seeking changes in copyright law to prevent B2B commodities exchanges from accessing their prices and using them without paying any fee.<sup>155</sup>

## 8. Switching Costs and Marketplace Interoperability

The feasibility of participation in more than one marketplace depends in significant part on a participant’s costs to switch between or among marketplaces and whether various marketplaces are interoperable. One workshop panelist observed that large companies will not readily switch from one B2B to another “because they have to invest hundreds of thousands of dollars to do the integration” by “hooking their net marketplace[s] into the back-end systems of the buyers and sellers, [*i.e.*,] into their supply chain and ERP systems[;] once that is done, it’s very hard for a buyer to move to a different location without redoing that whole thing all over again.”<sup>156</sup>

Many workshop panelists suggested that one of key factors to using more than one B2B electronic marketplace is whether the marketplaces are interoperable. Although many panelists indicated that currently there is not much technical interoperability among marketplaces,

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<sup>151</sup> Knoll 308.

<sup>152</sup> *Id.*

<sup>153</sup> Lucking-Reiley 455-56.

<sup>154</sup> *Id.*

<sup>155</sup> *See infra* Part 1.C.3.a (discussing pricing as proprietary information).

<sup>156</sup> Clark 387-88; *see also* Kinney (Stmt) 5.

interoperability will be important in the future.<sup>157</sup> Buyers may want the ability to select trading partners without being limited by the technology they use.<sup>158</sup> Indeed, as has been suggested, suppliers want to be able to digitize the content of its catalog once and be able to place it on multiple marketplaces without extensive reformatting.<sup>159</sup> It may require not only interoperable technical standards, but also interoperable business standards such as standardized product descriptions.<sup>160</sup> In any case, one workshop panelist cautioned, it may be premature to settle on interoperable standards now and, consequently, to stop innovation.<sup>161</sup>

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Business-to-business commerce can assume as many forms online as it does offline. Thus, while the building blocks of B2Bs are clear, the ultimate forms that B2Bs will take remains to be seen. Nonetheless, understanding the foundation of B2B marketplaces and certain basics about how they operate is necessary because, as will be discussed in Part 2, it is through the shift from the offline to online world that tremendous gains in efficiency are promised.

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<sup>157</sup> See, e.g., Stojka 408 (buyers need to gain access to many B2Bs, and today, “there isn’t a lot of interexchange communication”); Boeth 116 (interoperability issues have not become so painful that companies are screaming yet, but they will become important in the future); van Breen 205-06, 219 (by using a consortium, WorldWide Retail Exchange hopes to achieve an interoperable standard in next few months so that exchanges can be linked in the future).

<sup>158</sup> See, e.g., Knoll 293; Open Buying on the Internet (Stmt) 1.

<sup>159</sup> Fromer 111. Nonetheless, one workshop participant noted that in concentrated markets, interoperability may be of limited value. Knoll 308. In a concentrated market, participation in more than one exchange may require the company give up valuable product-related information. Such a trade-off may be worth it only if the company has a capital stake in the B2B. *Id.*

<sup>160</sup> Tarkoff 120.

<sup>161</sup> Kinney 119.

## PART 2

### EFFICIENCIES OF B2B ELECTRONIC MARKETPLACES

B2Bs have the potential to generate significant efficiencies, and even to make markets themselves more competitive. When businesses operate more efficiently and competitively, lower prices, improved quality and greater innovation may result for consumers.<sup>1</sup> Thus, B2Bs hold the promise of significant consumer benefits.

The full nature and extent of efficiencies that B2Bs will create has yet to be determined. Although some B2Bs are up and running and have so far created certain kinds of efficiencies, many more B2Bs are still in the planning stages, with the potential to realize more, fewer, or different kinds of efficiencies. Businesses are still assessing whether they need participation or ownership interests in a B2B to achieve the cost savings potentially available through Internet-based transactions, or whether a “private network” through which an individual firm transacted business over the Internet with its existing suppliers and customers might prove as effective in achieving cost savings and less burdensome in terms of investment, time, and effort than establishing or maintaining B2B ownership or participation. In the meantime, however, the following summarizes what workshop participants reported about the nature of efficiencies, actual and potential, that may be realized through B2Bs.

#### A. Actual and Potential Efficiencies

Whether or not a particular type of efficiency is realized is highly fact-dependent and can turn on any number of specifics, including the level of automation that characterizes the business, industry, and marketplace in question. A survey conducted by the National Association of Manufacturers in the Spring of 2000 found that “while 80 percent of manufacturers have Web sites, only 1 percent of companies are conducting e-commerce through them.”<sup>2</sup> This is entirely consistent with the experience of workshop participants. One participant in the metals industry observed that 80% of business-to-business processes are still manual, and the “20% that we consider to be automated, really aren't automated.”<sup>3</sup> In this latter category he placed the hundreds

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<sup>1</sup> See, e.g., WorldWide Retail Exchange (Stmt) 2 (“Reducing procurement costs will necessarily translate into more and better goods – at lower prices – for consumers.”), 3, 8; Teagarden 100 (“B2B e-commerce allows companies to do more with less. . . . [What that means for] consumers as a whole is a lower price for the end product.”); Bloch and Perlman (Stmt) 13 (“[T]he creation and proliferation of B2B exchanges represents an important development that promises to bring increased competition and more and better products to consumers at lower prices in a broad variety of industries.”).

<sup>2</sup> Jasinowski (Stmt) 3.

<sup>3</sup> Stewart 54.

of service centers that can receive an EDI transaction through PC software, but that must print out the order and then have it re-keyed to process the order through their system.<sup>4</sup>

Even if the technology is in place and accessible, there is still likely to be an “adjustment” period. One panelist noted that among her clients, typically small-sized businesses, more than 60 percent that completed their first transaction through her B2B did not do so online but, instead, called the toll-free number. However, she noted that 90% of these same businesses close the second transaction online.<sup>5</sup> The existence of a transition period applies to larger companies as well. “It’s [relatively] easy to change legacy systems,” a panelist explained, “it’s very hard to change legacy behavior. And legacy behavior is what American and global industries are all about.”<sup>6</sup>

In some instances, lack of automation could act as a bar to using these new technologies. A workshop participant discussing the electronic equipment industry stated that many suppliers within the industry “don’t have . . . internal decision-making capabilities automated or integrated.”<sup>7</sup> As such, if their main buyers were to require the suppliers to engage in a reverse auction, that would cause “tremendous fear.”<sup>8</sup> A reverse auction requires the seller-participants to “know or be able to calculate very quickly, their walk-away price.”<sup>9</sup> Such calculations would be hard when, for example, not only is the relevant information stored on many different spreadsheets, but it may also be contained “on Post-It notes on someone’s desk.”<sup>10</sup> The receptiveness of many industries to these newer technologies often varies considerably.

## **B. Administrative Costs**

B2Bs may facilitate substantial savings of administrative costs, the costs of effecting the transaction itself. Administrative costs include the time and energy a firm expends for everything from placing an order to issuing a check when goods are received.<sup>11</sup> Currently, such transactions

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<sup>4</sup> *Id.*

<sup>5</sup> Kim 181-82.

<sup>6</sup> Walsh 407.

<sup>7</sup> Knight 290.

<sup>8</sup> *Id.*

<sup>9</sup> *Id.* See *infra* at Part 1.C.3.b (describing reverse auctions).

<sup>10</sup> *Id.*

<sup>11</sup> Fromer 45-47 (discussing administrative costs as pertains to the financial department of a business).

usually take place through some combination of phone and fax interactions. One panelist detailed the process of purchasing via the phone and fax: An employee would have to call his purchasing manager; the purchasing manager call her supervisor and then send the response back to the employee, who would fill out a purchase order manually (purchase orders can be extensive documents), fax that purchase order to the supplier, who would determine the right price and return an invoice which, itself, would have to be processed.<sup>12</sup> Regardless of industry, company size, or product involved,<sup>13</sup> the costs attendant to purchasing through these more traditional mechanisms are often described as substantial and subject to significant reduction through B2B marketplaces. For example, one workshop panelist stated that, within the chemical and pharmaceuticals industry, the cost of a "face-to-face sales call is about \$575."<sup>14</sup> One of his dealers concluded, after some study, that the same transaction would cost about \$10 through a B2B.<sup>15</sup> Another panelist, addressing small and medium-sized enterprises in particular, stated that what would otherwise be a paper transaction costing \$100 could be reduced to \$10 when conducted through a B2B.<sup>16</sup>

Administrative costs also encompass the cost of fixing an incorrectly processed transaction. The pervasiveness and, therefore, the expense of administrative mistakes in the procurement process appears to be high. One panelist said that one of his "major retailers" told him that "40 percent of all of their purchase orders have errors in them."<sup>17</sup> The panelist elaborated, "That means that 40 percent of [the time of] their accounting staff, their receiving staff, and their production staff is spent on doing nonvalue-added activities."<sup>18</sup> The result is that consumers face higher prices to "cover our inefficiencies."<sup>19</sup> This panelist opined that e-commerce over the Internet can "take a very large percentage of that and just make it

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<sup>12</sup> Tarkoff 32.

<sup>13</sup> The substantial prospect for increased efficiency appears to hold to true for highly-engineered products, such as automotive parts, as well as outright commodities and more modestly-engineered retail goods. Knoll 263.

<sup>14</sup> Bhatt 276.

<sup>15</sup> *Id.*

<sup>16</sup> Loevy 261. Other estimates are more modest. *See, e.g.*, Jasinowski (Stmt) 3 (reduction in transaction costs by 10% or more had been experienced).

<sup>17</sup> Verloop 394. *See also* Phillips 269 ("40 percent of the orders that are done manually have [require] some sort of rework after the fact [owing to inaccuracy]").

<sup>18</sup> Verloop 394.

<sup>19</sup> *Id.*

disappear.”<sup>20</sup> Likewise, a representative of a multinational drug company predicted that, in fact, it is through improvements in the “speed and accuracy” that “most of the value is going to be gained.”<sup>21</sup>

Similarly, the “cost of exception handling goes way down online.”<sup>22</sup> “Exception handling” refers to special ordering, which is facilitated when orders are properly configured and “everyone can see what . . . [was] agreed on.”<sup>23</sup> Other orders that are complicated to fulfill include “backorders, partial shipments, returns, substitute products.”<sup>24</sup> Fulfilling these orders is labor-intensive and, therefore, expensive. “Moving the fulfillment process online should lower the number of exceptions since the buyer or technology will be able to resolve many of the issues [in] real time.”<sup>25</sup>

Addressing administrative costs from a more global perspective, one panelist observed that international sales are much more complex than sales within a single country. For example, buyers and sellers from different countries bring with them not only their own languages and currencies, but also their own “methods, business forms, product codes and descriptions and technical capabilities.”<sup>26</sup> Electronic B2B marketplaces may make it possible to manage the complexities resulting from such differences in “rational, cost-reducing ways.”<sup>27</sup> The same advantages that B2B e-marketplaces can provide to trade occurring between businesses located in different countries also would extend to single companies with branches that span many national boundaries.<sup>28</sup>

### **C. Search Costs**

B2Bs may also significantly reduce search costs, the costs buyers incur in identifying suppliers and vice-versa. The ease with which businesses can identify one another depends on,

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<sup>20</sup> *Id.*

<sup>21</sup> Gray 156.

<sup>22</sup> Phillips 269-70.

<sup>23</sup> *Id.*

<sup>24</sup> Morgan Stanley Dean Witter (Stmt) 97.

<sup>25</sup> *Id.*

<sup>26</sup> WorldWide Retail Exchange (Stmt) 7.

<sup>27</sup> *Id.*

<sup>28</sup> van Breen 166.

among other things, how readily a firm can compare prices, find suppliers or buyers to meet its needs, and identify good substitutes for the product sought.<sup>29</sup> All other things being equal, as transparency along any or all of these dimensions increases, search costs generally decrease. Reducing search costs in any or all of these ways could enhance competition and result in lower prices for consumers.

B2Bs may make it easier for buyers to comparison shop. For example, one panelist described how her B2B standardizes and aggregates data that eases comparison shopping, especially for small buyers, through presenting the products of multiple suppliers and their different prices and terms. The practical implications of this were underscored by the following anecdote: Under the traditional procurement system, a 20-person manufacturing company would have to page through “really, really thick” paper catalogs in order to comparison shop for any purchase – even something as small as an electric screwdriver. Through a B2B, comparison shopping that used to take several hours (if it was done at all) is now taking a few minutes.<sup>30</sup>

Reduced search costs also can benefit suppliers. Small and large suppliers alike can make money by having greater and cheaper access to more potential customers. The CFO of a small steel company during February and March 2000 used a B2B e-marketplace in the metals industry to “hook[] up with more than 50 new customers, 90% of whom he had never heard of before.”<sup>31</sup>

Large suppliers may also benefit. Those large suppliers that previously did not find it profitable to serve smaller buyers may now have “the ability to aggregate small customers in a central place and let them basically in a self-help model serve themselves.”<sup>32</sup> This enables the larger companies to undertake transactions that previously were not efficient.<sup>33</sup> For example, the

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<sup>29</sup> Morgan Stanley Dean Witter (Stmt) 12 (discussing commerce transparency and identifying its primary dimensions).

<sup>30</sup> Kim 153-55. There were differing views regarding the impact of B2Bs on standardizing goods. *See, e.g.*, Knoll 281 (noting participation on B2Bs could be “scary” in that it could result in the increasing commodification of products); Enron (Stmt) 3 (noting exchanges could also attempt to “unreasonably influence nonprice factors, [such as] . . . compelling suppliers to adopt standards that only correspond to that exchange[’s] . . . interests”); Sandhu 279 (noting that many products are already standardized and B2Bs will make it more difficult to conceal that fact from the consumer); Mann 456-58 (noting that in light of the current diversity in products and their buyers, she is skeptical that B2Bs will standardize them).

<sup>31</sup> Eryn Brown, *Is the Internet Stronger than Steel?*, *Fortune*, May 15, 2000, at 162; Morgan Stanley Dean Witter (Stmt) 35 (noting lower customer acquisition costs).

<sup>32</sup> Phillips 269.

<sup>33</sup> *Id.*

CFO of the same small steel company mentioned above stated that, whereas “[he] used to have to make 20 phone calls to get one coil of steel,” through use of a B2B he now has purchasing relationships with large suppliers who previously would not have even “notice[d]” this small buyer.<sup>34</sup>

In highly fragmented industries, it is particularly important to be able to reach suppliers at a lower cost.<sup>35</sup> The examples above involve MROs and the metals industry, both of which have a highly fragmented supplier base. In MRO distribution, the “top 50 players make up 13 percent of the marketshare. The number one player has less than three percent of the market share.”<sup>36</sup> Likewise, the metals industry is “highly, highly fragmented.”<sup>37</sup> “[T]he largest metals company in the world only owns three and a half percent of the global market.”<sup>38</sup> Reduced search costs may be particularly significant in this context.

Nonetheless, industries with more concentrated supplier bases – such as those manufacturing more complex products – also may benefit from heightened market transparency, for example, through reverse auctions. The lure of a reverse auction is that if competition in the marketplace is “relatively robust,” if the good has “a lot of price flexibility,” and if a contract for a sufficient amount of money is at stake, a buyer could have sellers from across the globe bidding against each other for its business. For example, in May 2000, the federal government held its first reverse auction.<sup>39</sup> The U.S. Navy sought a highly technical part with extensive specifications – the brains of an ejection seat used in Air Force aircraft. Three qualified sources which had previously provided such goods bid against one another. As the Navy Captain in charge of procurement summed it up, “[we] went online and we ended up achieving a savings of about 28 percent.”<sup>40</sup> The success was such that the long-term vision of the Navy Inventory Control Point is to “do all of our competitive procurements that make sense in a reverse auction scenario.”<sup>41</sup>

B2B reverse auctions also can facilitate competition between heterogeneous products by

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<sup>34</sup> Eryn Brown, *Is the Internet Stronger than Steel?*, Fortune, May 15, 2000, at 162.

<sup>35</sup> Kafka 169.

<sup>36</sup> Kim 154.

<sup>37</sup> Stewart 53.

<sup>38</sup> *Id.*

<sup>39</sup> B2G, business-to-government, is treated herein as a form of B2B wherein one of the businesses is the government.

<sup>40</sup> Huff 147-48.

<sup>41</sup> *Id.* at 149.

making it possible to compare “apples and oranges” in real time. In a so-called “transformation auction,” for example, heterogeneous products from suppliers are meaningfully compared by B2B software so that the buyer hosting the auction can make intelligent choices about what to buy.<sup>42</sup> This would be particularly useful where fast calculations are required to present different options in comparable terms – such as buy versus lease, or when there are multiple sources of a single commodity (*i.e.*, coal) but each one has different characteristics (*i.e.*, sulphur content).<sup>43</sup>

#### **D. New Markets**

Search costs could be reduced to such an extent that sales channels become viable that previously were not viable. As one analyst stated, electronic B2Bs have led to “[n]ew [m]arket [c]reation.”<sup>44</sup>

One example discussed by workshop panelists involved idle or business surplus.<sup>45</sup> Capital goods, such as a forklift, may have significant value even though the current owner no longer puts it to productive use. Prior to the Internet, significant revenue went unrealized in the absence of a viable market for such products.<sup>46</sup> That is because it was often not cost effective for the owner to disseminate information about its product and to gather relevant information regarding potential buyers. The “aggregating power” of the Internet can overcome circumstances where otherwise “the cost of information gathering outweighs the value of the surplus.”<sup>47</sup>

Another example of “new markets” relates to goods that are subject to “expiration.”<sup>48</sup> Just as perishable describes how physical goods such as fruit might spoil, “digital goods and services” are said to be “susceptible to expiration.”<sup>49</sup> Time is the critical factor. For example, the bandwidth industry runs at about 20% utilization. As one industry member said, the issue is pretty clear, “whatever you haven’t sold depreciates to zero.”<sup>50</sup> Bandwidth that would otherwise

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<sup>42</sup> Kinney 77-79.

<sup>43</sup> *Id.* 86-87.

<sup>44</sup> Salomon Smith Barney (Stmt) 16.

<sup>45</sup> *Id.* See also Kinney 79.

<sup>46</sup> Salomon Smith Barney (Stmt) 16.

<sup>47</sup> *Id.* at 16, 47.

<sup>48</sup> *Id.* at 19.

<sup>49</sup> *Id.*

<sup>50</sup> Mashinsky 257-58.

have gone unused is now being standardized and traded over the Internet through an exchange mechanism. Another example, the National Transportation Exchange (NTE), is a B2B focusing on the billions of dollars of trucking capacity that goes unused each year.<sup>51</sup> Through the NTE, shippers are able to post their excess trucking capacity. These postings are then matched with businesses who have goods to transport.

### **E. Maverick Purchasing**

Maverick purchasing – buying that occurs outside the normal channels – is a substantial problem for businesses. The National Association of Purchasing Managers estimates that maverick purchasing constitutes approximately thirty percent of company purchases.<sup>52</sup> B2Bs may enable businesses to reduce maverick spending and thereby reduce excess costs.

One significant example involves the volume contracts that buyers and suppliers frequently establish through processes such as annual negotiations. Under these negotiated contracts, individual orders are placed as the need arises. Maverick purchasing by buyers unaware of prior negotiations could result in the failure of a business to channel its purchases through its negotiated volume contracts.<sup>53</sup> Centralization of purchasing information could address that problem and also help prevent buying that reflects who the purchasing agent plays golf with rather than the volume discounts that have been negotiated.<sup>54</sup>

Electronic B2Bs are being designed to reduce the amount of unauthorized spending in numerous ways, including the imposition of spending limits for employees, and the preselection of specific suppliers and or specific products that can be purchased with no additional approval. B2Bs can also streamline the process of receiving approval if the purchaser seeks to diverge from the parameters of his or her purchasing authority. This means fewer delays and fewer unauthorized purchases.<sup>55</sup>

### **F. Joint Purchasing**

B2Bs also may afford efficiencies through increased joint purchasing. Joint purchasing

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<sup>51</sup> Salomon Smith Barney (Stmt) 17.

<sup>52</sup> Shridharani 157. *See also* Tarkoff 33.

<sup>53</sup> Gray 160-61.

<sup>54</sup> Clark at 404.

<sup>55</sup> Salomon Smith Barney (Stmt) 23.

can help reduce transaction costs through scale economies in purchasing, reduce manufacturing costs, and produce other efficiencies as well.

The following example illustrates the benefits of volume discounts for a single business with multiple buyers. Appleby's is a chain restaurant with approximately 400 company-owned stores. Through the services of a B2B, Instill, Appleby's was able to know exactly who was buying what and when. If each store goes through different distributors, it is extremely difficult to aggregate that data. But, once aggregated through a B2B, the chain could go to its suppliers and ask for a volume discount.<sup>56</sup>

Price discounts because of volume can also be achieved by aggregating the purchasing needs of wholly-separate businesses. One B2B, equalFooting, enables small business buyers to achieve some volume discounts through a "virtual" aggregation of purchases.<sup>57</sup> The founder of this B2B noted that as a logistical matter, the B2B would be unable to pool discrete orders as the need for them arises because in the MRO context, there are "over two million SKUs of items," and it is unlikely that sufficient buyers will need the same item around the same time. Instead, this B2B successfully requested that suppliers treat it as a large national account entitled to volume discounts. Frequently, this B2B received discounts not only from the suppliers, but also from shippers and other related services. Small businesses receive discounts on their purchases, discounts that would have otherwise been unavailable. XML integration between the B2B and the suppliers is integral to keeping such arrangements cost efficient for suppliers.<sup>58</sup>

## **G. Systems Integration**

Not only can B2Bs increase efficiency through the many mechanisms discussed thus far, but B2Bs can also be integrated with a firm's legacy computer systems so as to continue to reap, and expand upon the benefits of the earlier systems.<sup>59</sup>

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<sup>56</sup> Clark 403.

<sup>57</sup> One analyst viewed such a system as the virtual equivalent of an offline distributor. Kafka 228-29.

<sup>58</sup> See Kim 227-28; Morgan Stanley Dean Witter (Stmt) 81. See also Cogan 107-08 (Another B2B, GoCo-op, works with companies where there is "an opportunity for competitors to get together and either leverage certain services or have a division of labor where each of the members provides a different service or a different portion of the services to each other, and they gain economies of scale that way."). See *infra* at Part 1.B.2 for a discussion of the role of XML in facilitating the rise of B2Bs.

<sup>59</sup> See, e.g., Sullivan 252 (A "compelling reason" to join a B2B is to "leverag[e] the web technologies and ERP technologies out there to integrate into their back ends and improve their bottom lines."); Mirek 145 (Important to participation in B2Bs is their ability to provide "increased

As a practical matter, integrating B2Bs with back-offices or back-ends means that the B2B can receive necessary information, such as purchasing requirements, as it has been assembled by the legacy systems rather than requiring input into new B2B order screens.<sup>60</sup> The process may also work in reverse, with the B2B sending information directly into a legacy system. That way, if a B2B sends e-mails to panelists regarding orders, those business will not have to “re-key” that information into their legacy systems in order to process it.<sup>61</sup> For example, an ERP system may provide many items of information, including a determination of what is needed and when, notification of relevant departments (*e.g.*, receiving department) that a delivery is due, and verification of an invoice for the accounts payable department. “Because these internal notifications are so important, a web site that merely accepted orders could not serve industrial buyers. The receiving dock would not have authority to receive the goods, nor would the accounts payable department have authority to pay the invoice.”<sup>62</sup>

## H. Supply Chain Management

Heightened interaction between buyers and suppliers may facilitate supply chain management. B2Bs could enable suppliers all along the supply chain, potentially reaching multiple tiers of suppliers, to more quickly and more accurately learn what the buyers want and when they want it.<sup>63</sup> In the absence of such information, “buyers and sellers must make assumptions about each other’s needs.”<sup>64</sup> Unfortunately, as a practical matter, such efforts to predict needs are typically ill-fated. One workshop panelist stated that a steel company CEO had told him that in “the last 91 years they’ve never got a forecast [right].”<sup>65</sup> Consequently, “when evaluated along the entire length of a supply chain, the amount of inventory being held for contingencies is quite large, and collectively adds much inventory carrying cost, obsolescence, spoilage, or overstocks [or shortfalls].”<sup>66</sup> Supply chain management is particularly important for

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operational efficiencies, such as back-office integration.”)

<sup>60</sup> Kinney (Stmt) 5.

<sup>61</sup> Morgan Stanley Dean Witter (Stmt) 81.

<sup>62</sup> Kinney (Stmt) 5-6.

<sup>63</sup> Sculley & Woods (Stmt) 1 (“[T]hese net markets have the capability to tie together the manufacturer with its suppliers (Tier 1) and its suppliers’ suppliers (Tiers 2 & 3). This can lead to greater efficiencies . . . that dramatically reduce manufacturing time, inventory levels and distribution costs.”).

<sup>64</sup> Kinney (Stmt) 10.

<sup>65</sup> Stewart 65.

<sup>66</sup> Kinney (Stmt) 10.

“very complex products,” such as many direct products, because efficiencies are more closely tied to capacity planning.<sup>67</sup> Some speculate that B2Bs will enable companies to move from “push marketing” to “pull marketing.”<sup>68</sup> In a push model, business produces first and then tries to sell. In a pull model, “the consumer – stimulated, of course, by smart advertising and promotion – will pull product through the supply chain.”<sup>69</sup>

B2Bs are equipped to improve inventory management. “[Supply chain] optimization techniques require a near-constant level of analysis and refinement of production plans as conditions change, the volume of interaction that might occur between a buyer and a supplier attempting to jointly optimize is huge. The Internet can help solve the integration challenge by providing a low-cost conduit for requests and acknowledgments, as well as by defining standards for how requests and acknowledgments are formatted and shared.”<sup>70</sup>

With regard to inventory management, a purchase order may have several hundred line items on it. And companies may not pay the order until all of those line items are adequately reconciled. That is, it is only when someone signs off that they have received all the proper items in proper form and condition that the purchase order moves from accounts payable to the treasury for actual payment.<sup>71</sup> The result of this protracted process is that the supplier ends up bearing the financial burden of “a lot of inventory financing” resulting in “a lot of cost to capital.”<sup>72</sup> Increased automation, “getting the items standardized and getting that invoice flowing electronically and the reconciliation of that invoice electronic,” will save considerable money.<sup>73</sup>

## **I. Collaborations**

Enhanced efficiencies may also arise from other forms of collaboration.<sup>74</sup> Outsourcing

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<sup>67</sup> Kafka 169.

<sup>68</sup> Jay Akasie, *Ford's Model E*, *Forbes*, July 17, 2000, at 30, 31.

<sup>69</sup> *Id.*

<sup>70</sup> Kinney (Stmt) 28.

<sup>71</sup> Gray 156. *See also* WorldWide Retail Exchange (Stmt) 8 (noting potential for “improved payment terms”).

<sup>72</sup> WorldWide Retail Exchange (Stmt) 8.

<sup>73</sup> Gray 156.

<sup>74</sup> Kafka 146.

specific tasks through collaborations may enable a business to better focus upon its core competencies.<sup>75</sup> One panelist noted that some suppliers do not view the direct sales process as a core competency. For such suppliers, B2B e-marketplaces add value because they facilitate outsourcing or adding on of another channel of distribution.<sup>76</sup>

B2Bs also may facilitate collaborative conduct such as joint product design. “Increased collaboration between supplier, buyer and customer reduces the time to develop, produce and distribute new products. Improved communications enable stronger and more beneficial relationships between parties. . . . [For example, n]ew product specifications can then be transmitted over the Internet and sent to the factory floor for specialized production runs.”<sup>77</sup>

## **J. Middlemen**

Middlemen can play a significant role in generating efficiencies within the B2B context.<sup>78</sup> For example, as noted above, B2Bs may result in higher price transparency. The opportunity and the quandary for small businesses or less well-known brands is that buyers on a B2B must have sufficient confidence in order to be willing to do business with small businesses or less well-known brands that may seem untested to the buyer. Third-parties, or middlemen, have entered this void and are providing services that better enable B2B panelists to determine whether or not the entity with which they are dealing is a viable buyer, seller, or – for that matter – B2B.<sup>79</sup>

Middlemen have historically played the role of taking title to materials and acting as a distributor. One workshop panelist noted, “[t]here will always be a need for physical delivery.”<sup>80</sup>

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<sup>75</sup> Jasinowski (Stmt) 2.

<sup>76</sup> Sandhu 277-78. *See also* Lucking-Reiley 453 (“[I]f, in fact, electronic commerce is successful at reducing transaction costs the way everyone thinks it’s going to be, we may see a lot more outsourcing by firms, and a lot less vertical integration.”).

<sup>77</sup> Jasinowski (Stmt) 4. *See also* Morgan Stanley Dean Witter (Stmt) 46 (referring to “joint design processes, advanced part change notification” as “product life cycle collaboration”); Sculley & Woods (Stmt) 1 (noting that B2Bs can “lead to greater efficiencies in the design of products”).

<sup>78</sup> *See, e.g.*, Cooney 328-29; Spradlin 330-31.

<sup>79</sup> *See, e.g.*, Arnold 192; Chen 167-68; Libicki 251; Loevy (Stmt) 2-4; Kafka 194-95 (referring to such middlemen as “trust brokers”).

<sup>80</sup> Shridharani 175.

Accordingly, the more seamlessly the B2B is able to incorporate logistics services,<sup>81</sup> the better for its participants. But when a middleman is inefficient or fails to provide any value-added services, disintermediation may also be an avenue for increased efficiencies.<sup>82</sup>

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There is no clear division between the differing efficiencies detailed. When efficiency is promoted in one area, other efficiencies are often concurrently promoted. What is more, it is not clear to what extent these efficiencies will be realized and which, if any, will not. Part 3 will discuss the role of efficiencies within antitrust analysis.

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<sup>81</sup> *See, e.g.*, Libicki (Stmt) (weights and measures are an example of possible logistics services).

<sup>82</sup> *See, e.g.*, Allgaier 175-76; Loevy 327.

## PART 3

### ANTITRUST ANALYSIS OF B2BS

As illustrated in Part 2, B2Bs can offer tremendous efficiencies. They can help reduce administrative costs, cut search costs, open new markets, check unmonitored corporate spending, aid efficient joint purchasing, facilitate supply chain management, and facilitate efficient collaborations for such projects as joint product design, among other things.<sup>1</sup>

B2Bs may also raise a wide variety of antitrust issues, depending on their structure, bylaws, operating rules, contracts with participants, ownership and management, the characteristics of the markets in which they operate and that they may affect, and other factors. Workshop panelists reported, however, that the antitrust concerns that B2Bs may raise are not new and agreed that B2Bs are amenable to traditional antitrust analysis. Some panelists commented that, when antitrust concerns do arise, familiar safeguards may be sufficient to address those issues. Indeed, it appears likely that many potential concerns could be eliminated through well-crafted B2B operating rules. Consequently, the discussion that follows does not warn of insoluble problems, but rather lays the foundation for identifying and addressing circumstances that warrant antitrust scrutiny.<sup>2</sup>

Rather than address all potential issues, this Report focuses only on those issues that were discussed extensively at the workshop. Workshop participants expressed concerns about how B2Bs would affect competition in two types of broadly defined markets: the markets for goods traded on B2Bs (or derived from those traded on B2Bs) at both the seller and the buyer levels, and the market for marketplaces themselves. Participants noted that markets for goods traded on B2Bs (or derived from those traded on B2Bs) might be affected by information-sharing

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<sup>1</sup> See *supra* at Part 2.B-2.I.

<sup>2</sup> To date, the Commission has reviewed only one B2B. See *In re Covisint, Inc.*, File No. 001 0127 (Sept. 11, 2000), *closing letter to General Motors Corp., Ford Motor Co., and DaimlerChrysler AG available at <[www.ftc.gov/os/2000/09/covisintchrysler.htm](http://www.ftc.gov/os/2000/09/covisintchrysler.htm)>* (last visited October 23, 2000). In its letter closing the investigation of whether the formation of Covisint violates Section 7 of the Clayton Act and terminating the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act, the Commission found no further action warranted at this time but stated as follows:

Because Covisint is in the early stages of its development and has not yet adopted bylaws, operating rules, or terms for participant access, because it is not yet operational, and in particular because it represents such a large share of the automobile market, we cannot say that implementation of the Covisint venture will not cause competitive concerns.

*Id.*

agreements that could facilitate coordination, the exercise of monopsony power by large buying groups, or agreements among competitors to exclude or discriminate against rivals of a B2B's participant-owners. In addition, the health of competition among marketplaces themselves might be affected by exclusivity, either de facto through over-inclusive ownership structures or through rules or incentives that keep a B2B's participants from using or supporting a rival exchange.

Such competition issues are not new to antitrust analysis. Indeed, "the issues in the B2B area are the same kinds of issues that [the FTC has] dealt with in joint venture analysis."<sup>3</sup> "The evolution of dynamic economies is about change, improvements, success, and failures, but always progress,"<sup>4</sup> and although such dramatic technological changes have sometimes "turned the world upside down . . . our antitrust laws and basic modes of analysis have survived."<sup>5</sup> Monitoring B2Bs under the "old rules" of antitrust will present "new challenges to the FTC," to be sure.<sup>6</sup> But the FTC has learned from its decades of experience "that in new markets, like those based in technology, . . . the fundamental principles of antitrust and consumer protection still apply."<sup>7</sup> Panelists agreed that B2Bs are subject to traditional antitrust analysis, noting that "the joint venture analysis and the [Competitor] Collaboration Guidelines are appropriate in this framework."<sup>8</sup> Accordingly, the following discusses these issues pursuant to familiar principles of

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<sup>3</sup> Remarks of Commissioner Thomas B. Leary Before FTC Workshop on Competition Policy in The World of B2B Electronic Marketplaces, Washington, D.C. (June 30, 2000), *available at* [www.ftc.gov/bc/b2b/b2bleary.htm](http://www.ftc.gov/bc/b2b/b2bleary.htm) (last visited Oct. 18, 2000).

<sup>4</sup> Remarks of Commissioner Orson Swindle Before FTC Workshop on Competition Policy in The World of B2B Electronic Marketplaces, Washington, D.C. (June 29, 2000), *available at* [www.ftc.gov/bc/b2b/b2bswindle.htm](http://www.ftc.gov/bc/b2b/b2bswindle.htm) (last visited Oct. 18, 2000).

<sup>5</sup> Remarks of Commissioner Thomas B. Leary Before FTC Workshop on Competition Policy in The World of B2B Electronic Marketplaces, Washington, D.C. (June 30, 2000), *available at* [www.ftc.gov/bc/b2b/b2bleary.htm](http://www.ftc.gov/bc/b2b/b2bleary.htm) (last visited Oct. 18, 2000).

<sup>6</sup> Remarks of Commissioner Sheila F. Anthony Before FTC Workshop on Competition Policy in The World of B2B Electronic Marketplaces, Washington, D.C. (June 29, 2000), *available at* [www.ftc.gov/bc/b2b/b2banthony.htm](http://www.ftc.gov/bc/b2b/b2banthony.htm) (last visited Oct. 18, 2000).

<sup>7</sup> Remarks of Commissioner Mozelle W. Thompson Before FTC Workshop on Competition Policy in The World of B2B Electronic Marketplaces, Washington, D.C. (June 30, 2000) *available at* <http://www.ftc.gov/bc/b2b/b2bthompson.htm> (last visited Oct. 18, 2000).

<sup>8</sup> Proger 508-09 (suggesting "traditional antitrust analysis" for B2Bs, and referring to the Department of Justice & Federal Trade Commission, Antitrust Guidelines for Collaborations Among Competitors (2000) (hereinafter "Competitor Collaboration Guidelines")); *see also* Wilkinson 557-58 (noting that although the facts presented by B2Bs are novel, the antitrust "analysis remains the same"); Keller & Heckman (Stmt) 1-2 (noting that the Competitor

antitrust law.

## **A. Market for Goods Bought & Sold on B2Bs**

### **1. Information-Sharing Agreements**

As the Competitor Collaboration Guidelines make clear, information-sharing agreements among competitors may be procompetitive and reasonably necessary to realize a collaboration's procompetitive benefits.<sup>9</sup> Indeed, information-sharing within B2Bs may, under certain circumstances, help them realize important efficiencies and facilitate prompt competitive responses in the market.<sup>10</sup> However, at the FTC's workshop, several participants expressed concerns that information-sharing agreements in the context of B2Bs could facilitate coordination on price or other competitive terms and thereby be likely to injure competition in the market for the goods traded on the B2B or in downstream product markets.<sup>11</sup> They noted that the same factors that make the efficiencies of B2Bs possible – the collaborative nature of B2Bs and the Internet's power to allow the efficient exchange of information – also have the potential to raise anticompetitive concerns, particularly in connection with information sharing. The difficult task is determining when information-sharing agreements are procompetitive and when they are likely to injure competition. As one participant put it, “Whether [instant transmission of information] constitutes the effective functioning of Adam Smith's perfect marketplace or collusive violations

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Collaboration Guidelines provide “an analytical framework for examining the organization and operation of B2B sites,” and that “[a]lthough Internet transactions and B2B sites are based on new or emerging technology, the same fundamental analytical framework continues to apply”); Foer (Stmt) 1-2 (refuting argument that antitrust should not apply to the “new economy”).

<sup>9</sup> Competitor Collaboration Guidelines at § 3.31(b).

<sup>10</sup> *See, e.g., supra* at Part 2.C, 2.D, 2.H, 2.I. *See generally* United States v. United States Gypsum Co., 438 U.S. 422, 443 n.16 (1978) (exchange of information among competitors can “in certain circumstances” promote efficiency and competition).

<sup>11</sup> *See, e.g.,* Foer (Stmt) 2 (“Too much [information] sharing” can enable participants to fix prices “through coordination mechanisms that are so subtle that price fixing may never be provable in court” and thus “[w]e need antitrust rules as to what information can or cannot be shared among competitors.”); Cooper 505 (collusion is an issue); Baker 494-95 (raising collusion concerns); Enron (Stmt) 3 (information made available through a B2B “should not be used to reduce competition” among the B2B's participants). *Cf.* Charles F. Rule, Mark E. Plotkin, & Michael J. Fanelli, “B2B or Collusion? That Is the Question Antitrust Enforcers Will Ask of Business-to-Business Sites,” *Legal Times*, April 3, 2000, at 36.

of antitrust laws remains to be seen, and will likely differ in particular cases.”<sup>12</sup>

Participants raised a variety of ways in which certain information-sharing agreements through B2Bs could facilitate collusion. In particular, they expressed concern about the incentives of the B2B’s participant-owners to share competitively sensitive information only among themselves.<sup>13</sup> They asked, for example, whether seller-owners in a concentrated market could agree to a practice that would let them see B2B data about the prices that their rivals are charging, and whether that could lead to their tacit collusion on price – tacit collusion that might be more likely to succeed given an enhanced ability to monitor such interdependent behavior through the B2B.<sup>14</sup> Concerns were not limited to sellers’ actions. Workshop participants questioned whether buyers could share information through a B2B that could lead to tacit collusion and the effective policing of such a tacit arrangement. For example, they expressed concerns as to whether buyers could agree to share through the B2B enough information about their purchases of inputs to lead to tacit collusion on the prices they would charge for their outputs or on the quantity of outputs that they would produce.<sup>15</sup> Such a practice could also offer a means of detecting deviations from such tacit arrangements, they noted.<sup>16</sup> Moreover, they asked whether buyers could agree to share information through a B2B about transaction terms such as “payment options, payment dates, financing terms, and perhaps even warranties,” and whether that could lead to the “standardization” of those terms.<sup>17</sup> These are but a sampling of the

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<sup>12</sup> Keller & Heckman (Stmt) 2. *See also* Baker 494 (“B2B exchanges seem to me to be about information exchange . . . but of course information exchange can be the source of competitive problems as well.”). *But see* Jasinowski 503-04 (stating that information sharing is more likely to be pro-competitive than anticompetitive).

<sup>13</sup> *See, e.g.*, OESA (Stmt) 4 (if “the exchange is controlled by all participants in a specific level of the supply chain, they will be incentivized to share specific information across that level and to mask the information with regard to participants at different levels.”); Keller & Heckman (Stmt) 5-6 (information exchange concerns “may be exacerbated” where one or more market participants own the marketplace). Some raised concerns about whether the participant-owners might do so by sending employees to serve on the board of directors of the B2B or to work for the B2B in some other capacity. *See supra* at Part 1.C.6.

<sup>14</sup> *See, e.g.*, Currenex (Stmt) 2; Bloch & Perlman (Stmt) 4-5; Keller & Heckman (Stmt) 5; *cf.* Mirek 188 (if B2B allows sellers to learn from each other confidential information about buyers’ needs in advance, sellers can increase their prices in light of those needs); Shridharani 185 (raising similar concern).

<sup>15</sup> *See, e.g.*, Keller & Heckman (Stmt) 5; Bloch & Perlman (Stmt) 4-5.

<sup>16</sup> *See* Bloch & Perlman (Stmt) 5.

<sup>17</sup> *See* OESA (Stmt) 7.

concerns raised.

Agreements to share information are typically assessed under Section 1 of the Sherman Act, 15 U.S.C. § 1, under the “rule of reason.”<sup>18</sup> Thus, an antitrust analysis of such agreements would focus first on the likelihood of any anticompetitive effects,<sup>19</sup> examining, among other things, the structure of the market, the market shares and relationships among the information-sharing parties, and the kind of information shared.<sup>20</sup> Only if the analysis suggests that anticompetitive harm is likely would the focus shift to an examination of the efficiencies the information-sharing practice may promote, and whether practical, significantly less restrictive alternatives would achieve the same efficiencies.<sup>21</sup>

Certain types of information-sharing agreements might facilitate coordination on price or other matters. In principle, a firm in a concentrated industry

may set its prices knowing that a price cut would be quickly matched by others; each would also know that stable high prices, maintained by all firms, would benefit all. But, the problem for such firms (at least in principle) is that each also knows that for it alone the best of all possible worlds is to attract customers through a small price cut not matched by the others. Since all know this, how can they keep each other from

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<sup>18</sup> See *Gypsum*, 438 U.S. at 443 n.16. Of course, price-fixing is a per se violation of Section 1 (see, e.g., *Broadcast Music, Inc. v. Columbia Broadcasting System*, 441 U.S. 1, 8 (1979)), and evidence of information exchange can be used to support a claim of a price-fixing scheme. See, e.g., *In re Coordinated Pretrial Proceedings in Petroleum Products Antitrust Litigation*, 906 F.2d 432, 447 n.13, 448 n.15 (1990), cert. denied, 500 U.S. 959 (1991); Areeda, *Antitrust Law*, at ¶¶ 1407a, 1407b (1986). However, discussion of such price-fixing agreements is beyond the scope of this report.

<sup>19</sup> See *Competitor Collaboration Guidelines* at § 3.3.

<sup>20</sup> See *infra* at Part 3.A.1.a; see also *Competitor Collaboration Guidelines* at § 3.31(b).

<sup>21</sup> See *infra* at Part 3.A.1.b, c; see also *Competitor Collaboration Guidelines* at §§ 3.3, 3.36; Susan S. DeSanti & Ernest A. Nagata, “Competitor Communications: Facilitating Practices or Invitations to Collude? An Application of Theories to Proposed Horizontal Agreements Submitted for Antitrust Review,” 63 *Antitrust L.J.* 93, 96 (1994) (outlining issues to address in applying rule of reason analysis to an information exchange). Panelists noted, however, that even though antitrust enforcers should test efficiencies only when the analysis suggests anticompetitive consequences in the first place, see *Competitor Collaboration Guidelines* at § 3.31 (“The Agencies do not undertake a full analysis of procompetitive benefits . . . unless an anticompetitive harm appears likely”), counselors may wish to ask their clients, as an initial matter, whether their B2B practices are necessary to promote the efficiencies they seek. See *Krattenmaker* 500, 577; *Muris* 554-55; cf. *Baer* 538.

cutting prices? How can they guarantee that industry prices stay high? How can they prevent the forces of competition from breaking out, with one or another firm yielding to the temptation to cut its own prices while hoping the others will not match the low price? Each firm realizes that any formal communication with its competitors about such matters could lead to antitrust prosecution and a finding of a traditional agreement. But each fears that, without such communication, its competitors will “chisel” on the tacit pricing arrangement, perhaps through secret or selective price cuts (which from the public’s point of view should be encouraged).<sup>22</sup>

Information-sharing agreements (and other facilitating practices) can reduce this uncertainty. They can increase the likelihood that firms in a concentrated market will set supra-competitive prices and can “help [them] ‘police’ interdependent pricing practices, practices that help them keep prices above competitive levels without the need for any formal price agreement.”<sup>23</sup>

Likewise, as the Competitor Collaboration Guidelines make clear, buying collaborations might also “facilitate collusion by standardizing participants’ costs or by enhancing the ability to project or monitor a participant’s output level through knowledge of its input purchases.”<sup>24</sup> As one industry’s suppliers’ association has noted, an “entirely transparent collaborative venture” can reduce the “level of uncertainty” in this way.<sup>25</sup> “Eliminate the uncertainty, and participants will tend to move away from individual profit maximizing models to a collusive one.”<sup>26</sup> For these reasons, such agreements to share competitively significant information are examined closely.<sup>27</sup>

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<sup>22</sup> *Clamp-All Corp. v. Cast-Iron Soil Pipe Inst.*, 851 F.2d 478, 484-85 (1<sup>st</sup> Cir. 1988) (Breyer, J.), cert. denied, 488 U.S. 1007 (1989). *See also* DeSanti & Nagata, 63 Antitrust L.J. at 95-96 (distinguishing “coordinated interdependence or tacit collusion” from “a facilitating practice that increases the likelihood of tacit collusion”).

<sup>23</sup> *Clamp-All*, 851 F.2d at 484; *see also* DeSanti & Nagata, 63 Antitrust L.J. at 95. Nor is tacit collusion on price the sole concern. Tacit collusion on other terms may be significant as well. *See, e.g.*, DOJ & FTC Horizontal Merger Guidelines at § 2.11 (April 2, 1992, revised April 8, 1997) (“Terms of coordination need not perfectly achieve the monopoly outcome in order to be harmful to consumers.”); *Catalano v. Target Sales*, 446 U.S. 643 (1980) (per curiam) (unlawful agreement on credit terms).

<sup>24</sup> Competitor Collaboration Guidelines at § 3.31(a).

<sup>25</sup> OESA (Stmt) 3.

<sup>26</sup> OESA (Stmt) 3.

<sup>27</sup> *See, e.g.*, *United States v. Container Corp. of America*, 393 U.S. 333, 337 (1969) (agreement to exchange information held to violate Section 1); *United States v. ATP*, 58 Fed. Reg. 3971 (1993) (Proposed Final Judgment and Competitive Impact Statement, *U.S. v. Airline Tariff Publishing Co.*) (describing charge that airlines operated a fare dissemination system that

### a. Factors Suggesting Antitrust Concern

Whether information-sharing agreements are indeed likely to injure competition depends on the facts, which are likely to vary among B2Bs. Where agreements that may facilitate anticompetitive coordination are at issue, certain key factors may shape the analysis. Each of these factors contributes to the analysis; one must look at them together to assess any given factual circumstances. Nevertheless, with that caveat, at least five factors, among others, are relevant.

First, what is the structure of the market that the B2B serves? All other things being equal, the greater the degree of concentration in the market, the greater the concern about possible effects on competition.<sup>28</sup> For example, under certain circumstances, greater information flow in a B2B market with many buyers and few sellers may drive up the prices that those buyers pay.<sup>29</sup> Likewise, all other things being equal, the greater the share of the market controlled by the information-sharers, the greater the likelihood of concern.<sup>30</sup> On the other hand, low entry barriers to the market for the goods traded on the B2B may enable new entrants to foil any chances for information-sharing to facilitate collusion. Finally, the homogeneity of products or firms within

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unreasonably facilitated airfare coordination); Competitor Collaboration Guidelines at § 3.31(b). Possible competitive concerns arising absent an agreement (*see, e.g.*, Stone Container Corp., Docket No. C-3806, Complaint, *available at* <[www.ftc.gov/os/1998/9802/9510006.cmp.htm](http://www.ftc.gov/os/1998/9802/9510006.cmp.htm)> (charging invitation to collude in violation of Section 5 of the Federal Trade Commission Act, 15 U.S.C. § 45), settled by consent decree, *available at* <[www.ftc.gov/os/1998/9806/9510006.do.htm](http://www.ftc.gov/os/1998/9806/9510006.do.htm)>, *but see* Stone Container Corp., Dissenting Statement of FTC Commissioner Orson Swindle, 5 Trade Reg. Rep. (CCH) ¶ 24,390, *available at* <[www.ftc.gov/os/1998/9802/9510006.os.htm](http://www.ftc.gov/os/1998/9802/9510006.os.htm)> (last visited Oct. 19, 2000) (stating that facts do not support invitation-to-collude theory in this case); *E.I. du Pont de Nemours & Co. v. FTC*, 729 F.2d 128 (2d Cir. 1984) (discussing unilateral facilitating practices)) were only briefly discussed during the workshop and are beyond the scope of this report.

<sup>28</sup> *See, e.g.*, Kinney (Stmt) 37 (where sellers are fragmented, online reverse auctions “can be set up with little fear of outright supplier collusion or tacit collusion through signaling.”). *See generally* Gypsum, 438 U.S. at 443 n.16 (“structure of the industry involved” can be an important factor in determining whether information-sharing among competitors is pro- or anti-competitive).

<sup>29</sup> *See* Hal R. Varian, “Economic Scene: When commerce moves online, competition can work in strange ways,” *N.Y Times*, August 24, 2000, at C2.

<sup>30</sup> *See* Container, 393 U.S. at 337 (noting relevant industry’s “dominat[ion] by relatively few sellers” in finding information-sharing agreement violates Section 1); Competitor Collaboration Guidelines at §§ 3.33 & n.43 (discussing importance of market share); 4.2 (establishing safety zone where market shares of the collaboration and its participants collectively account for no more than twenty percent of relevant market or markets).

the market, the characteristics of buyers and sellers, the characteristics of typical transactions, and the advantage a firm might gain by cheating on a price-fixing deal are additional factors relevant to such an analysis.<sup>31</sup> In short, to the extent that a particular market is less susceptible to collusion, information-sharing agreements through B2Bs are likely to pose fewer collusion risks.

Second, who is sharing the information? Information shared among competitors is generally, although not always, more likely to raise concern than information shared among non-competitors.<sup>32</sup>

Third, what type of information is being shared? As the Competitor Collaboration Guidelines point out, “[o]ther things being equal, the sharing of information relating to price, output, costs, or strategic planning is more likely to raise competitive concern than the sharing of information relating to less competitively sensitive variables.”<sup>33</sup> For example, shared information relating to direct goods is generally more likely to generate antitrust concern than shared information relating to indirect goods. Thus, retailers sharing information about their purchases of lightbulbs to illuminate their stores may raise fewer concerns than their sharing information about their direct input purchases.<sup>34</sup>

Fourth, how old is the information? All other things being equal, sharing contingent or future pricing information is generally more troubling than sharing information about past transactions.<sup>35</sup> Sharing information about contingent pricing can allow competitors to signal

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<sup>31</sup> See *Container*, 393 U.S. at 337 (noting relevant product’s “fungib[ility]” in finding information-sharing agreement violated Section 1); Competitor Collaboration Guidelines at § 3.33 (noting importance of factors discussed in Section 2.1 of the 1992 DOJ/FTC Horizontal Merger Guidelines which discusses factors relevant to likelihood of coordinated interaction).

<sup>32</sup> Baker 495. However, under certain circumstances, even information-sharing between buyers and sellers can raise concerns. See, e.g., *In re Lockheed Corp.*, 119 F.T.C. 618 (1995) (consent order); *Lockheed Corp., et al., Proposed Consent Agreement With Analysis to Aid Public Comment*, 60 Fed. Reg. 5408, 5413 (Jan. 27, 1995) (discussing proposal that certain information that firm received from military aircraft manufacturers who purchased its military aircraft components, not be disclosed to the firm’s division that manufactured and sold competing military aircraft).

<sup>33</sup> Competitor Collaboration Guidelines at § 3.31(b); see also *Gypsum*, 438 U.S. at 443 n.16 (“nature of the information exchanged” can be an important factor in determining whether information-sharing among competitors is pro- or anti-competitive).

<sup>34</sup> See *Krattenmaker* 498-99.

<sup>35</sup> See, e.g., 58 Fed. Reg. 3971 (1993) (Jan. 12, 1993) (Proposed Final Judgment and Competitive Impact Statement, *U.S. v. Airline Tariff Publishing Co.*). The case settled through

potential prices to each other while preserving “the opportunity to pull those prices back if their rivals [do not] act in a certain way.”<sup>36</sup> And, as discussed in the Competitor Collaboration Guidelines, sharing information about instantaneous transactions can also raise antitrust concerns.<sup>37</sup> For example, in frequent, small-stake online auctions, bidders may have a chance to learn strategic behavior and adjust their future bids accordingly.<sup>38</sup>

Fifth, how accessible is the information other than through the B2B? All other things being equal, sharing information that is unique to the B2B is generally more likely to raise antitrust issues than sharing information that can be found elsewhere, and sharing information that can be found elsewhere but only with difficulty is generally more likely to merit antitrust scrutiny than sharing information that can be found elsewhere just as readily as it is found on the B2B. One panelist’s comments illustrated this point well. The panelist, the head of a foreign currency B2B, stated that until the advent of B2Bs, suppliers in the market that her B2B serves had “typically only known about a small sliver of the customer transactions that they were particularly

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consent decrees that, among other things, prohibited dissemination of fares that were intended only to communicate planned or contemplated fares or contemplated fare changes. *See United States v. Airline Tariff Publishing Co.*, 836 F. Supp. 9 (D.D.C. 1993) (settlement with two defendants); *United States v. Airline Tariff Publishing Co.*, 1994 WL 502091, 1994 WL 454730 (D.D.C. 1994) (settlement with remaining defendants). *See also* Rule 512-13 (indicating current prices less troubling than future prices). Reflecting a similar judgment, Statement 6 of the 1996 DOJ & FTC Statements of Antitrust Enforcement Policy in Health Care establishes an antitrust safety zone for the exchange of certain past pricing data (specifically, data over 3 months old) in particular circumstances.

<sup>36</sup> *Correia* 502 (exchanging such contingent prices ought to send up a “red flag” for enforcers); *see also Proger* 509 (agreement to publish future pricing “raise[s] an issue”); Rule 512-13 (future prices problematic); Jonathan B. Baker, “Identifying Horizontal Price Fixing in the Electronic Marketplace,” 65 *Antitrust L.J.* 41, 51 (1996) (rapid information exchange “can facilitate coordination even if it is what economists term ‘cheap talk,’ – that is, communication imposing little or no costs of commitment on the parties”).

<sup>37</sup> *See* Competitor Collaboration Guidelines at § 3.31(b) (“Similarly, other things being equal, the sharing of information on current operating and future business plans is more likely to raise concerns than the sharing of historical information.”).

<sup>38</sup> Kinney (Stmt) 32. *See generally Gypsum*, 438 U.S. at 443 n.16 (“Exchanges of current price information, of course, have the greatest potential for generating anticompetitive effects and although not per se unlawful have consistently been held to violate the Sherman Act.”). *But see Correia* 502 (exchange of current price information raises fewer concerns since it is “very hard to imagine a very effective way to collude” when transactions are basically instantaneous).

bidding on.”<sup>39</sup> She stated that now, however, suppliers who own a B2B in this market (and who thus would appear to compete with hers) are in a position to discover “every transaction that a customer is involved with, whether they participate [in that transaction] or not.”<sup>40</sup> B2Bs have also introduced an “unprecedented ability to monitor prices in realtime” in that market.<sup>41</sup> This new ability of competing sellers to learn “each other’s bids and prices on every trade instantly,” she said, raises a significant collusion concern.<sup>42</sup>

Exclusivity policies may also aggravate collusion risks. If, notwithstanding the advantages of B2B participation, B2B participants have the ability and incentive to trade secretly outside the B2B, they may undermine a collusive scheme. Exclusivity could shut off the opportunity to cheat. Moreover, it may enhance the value of the information being shared. For example, if Seller 1 can discover what Seller 2 sold on a B2B, and also knows that Seller 2 is required by the B2B’s exclusivity policy to do all its selling on that B2B, then Seller 1 knows quite a bit about Seller 2’s selling practices. By contrast, if there is no exclusivity policy, Seller 2 might commit only a small fraction of its sales to the B2B, greatly reducing the value of the information that Seller 1 could glean from the B2B. (This is also true of buyers who purchase through the B2B.)<sup>43</sup>

## **b. Efficiencies**

Is the information-sharing practice reasonably necessary to promote certain efficiencies? How might information sharing enhance competition? In some cases, information-sharing may promote competition or make businesses run more efficiently. It is, after all, the information-sharing capabilities of B2Bs – particularly their powers to let trading partners share information with each other – that help enhance price transparency by letting buyers solicit more bids more quickly, by facilitating comparison-shopping, and by giving sellers and buyers greater and cheaper access to more potential trading partners. Likewise, it is the information-sharing properties of B2Bs that make supply-chain management possible. These are but a few examples of the ways that information-sharing can enhance efficiencies and competition.<sup>44</sup> In practice, the import of

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<sup>39</sup> Mirek 188.

<sup>40</sup> Mirek 188.

<sup>41</sup> Mirek 199.

<sup>42</sup> Mirek 200. *See also* Currenex (Stmt) 2.

<sup>43</sup> *Cf.* Cooper 506 (raising this issue in general terms).

<sup>44</sup> *See supra* note 10 to Part 3. *But see* Mitnick 519-20, 546-47 (stating that efficiencies may be sacrificed when antitrust concerns prevent owner-participants from using the B2B both as a buyer and as a seller in the same market, but speculating that some architectural solution may be able to solve the problem); *cf.* energyLeader (Stmt) 14 (to avoid such problems, energyLeader

such effects would depend on the facts of the particular setting in which they were presented.

### **c. Avoiding Antitrust Risk**

In light of any such efficiencies, there would also be consideration of whether they could be achieved through a practical, significantly less restrictive alternative. Workshop participants identified many possible mechanisms for doing so. For example, a B2B may restrict the information available to certain participants in online auctions or exchanges.<sup>45</sup> In “fragmented global market[s],” one B2B’s auction server can be programmed to allow suppliers access to more information, and in “more concentrated markets,” it can allow them access to less information.<sup>46</sup> In some B2Bs, a seller can only see other sellers’ prices but not their names,<sup>47</sup> or can see only where its latest bid ranks among other sellers’ bids.<sup>48</sup> Online catalogs may also be segmented so that sellers cannot see the prices quoted by their competitors<sup>49</sup> and buyers cannot see what other buyers are being charged.<sup>50</sup>

B2Bs may also use nondisclosure and confidentiality agreements. Buyers and suppliers using FreeMarkets work under nondisclosure agreements that require potential suppliers to keep a buyer’s proprietary RFQ information confidential, for example, and MetalSite gives its employees antitrust training and requires them to sign agreements relating to confidentiality and

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sites “in some cases” deny sellers access to pricing information of other sellers in the same market).

<sup>45</sup> In some matters, the FTC has determined that provisions to limit the exchange of information can help address competitive concerns. *See, e.g.*, *In re Eli Lilly and Company*, 120 F.T.C. 243 (1995); *In re Martin Marietta Corp.*, 117 F.T.C. 1039 (1994); *In re General Motors*, 103 F.T.C. 374 (1984).

<sup>46</sup> *See, e.g.*, Kinney (Stmt) 39 (discussing FreeMarkets); *see also* energyLeader (Stmt) 8 (designer of the online auction can determine whether to hide bidders’ identities and/or bids).

<sup>47</sup> *See* Stojka 381-83 (anonymous online auction); Mashinsky 272-73 (price information for specific transactions available on an anonymous basis).

<sup>48</sup> *See* Kinney 81-82, 88.

<sup>49</sup> *See* energyLeader (Stmt) 14 (depending on the software used, a seller in an online catalog may be prevented from accessing other sellers’ price information).

<sup>50</sup> *See* Phillips 300-01 (discussing online catalogs permitting some data to be seen only by certain buyers); Verloop 380 (discussing online catalog that prevents buyer from seeing what seller is charging other buyers).

noncompetition.<sup>51</sup>

B2Bs may develop practices that keep sensitive information from board members employed by B2B participants. At the workshop, for example, one B2B founder stated that he planned to have his B2B require that its board of directors not receive information from the exchange.<sup>52</sup>

Finally, some participants suggested the use of “audit mechanism[s]” that let participants know whether the B2B’s rules are being followed,<sup>53</sup> and the use of penalties for violating operating rules.<sup>54</sup>

Would such measures adequately safeguard against the anti-competitive harm? The record reflected a variety of views on that score.<sup>55</sup> In this regard, it may help that B2Bs often have inherent incentives to make sure such measures do work, since the participants who use the

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<sup>51</sup> See Kinney 186; Stewart 104. *But cf.* Chen 187 (nondisclosure and confidentiality agreements will take time to develop).

<sup>52</sup> Roberts 384. *But see* Currenex (Stmt) 2 (“there is no firewall that can be constructed to separate board members from the information required to fulfill their fiduciary responsibility vis-a-vis the exchange”).

<sup>53</sup> Sunder 465-66; *see also* Ernst & Young (Stmt) 2; Mark Del Bianco, “Meet the Old Boss, Same As the New Boss: Emerging Antitrust Issues in the Second Wave of B2B E-Commerce,” ABA Antitrust Section Internet Committee Newsletter, Summer 2000 (forthcoming) (discussing source code audit provisions).

<sup>54</sup> Bloch & Perlman (Stmt) 10 (suggesting that improper information sharing could be reduced by having a marketplace promulgate “strict antitrust and confidentiality guidelines that provide, among other things, that improper sharing of competitive information will result in severe penalties, including possibly requiring equity members to sell their interests in the exchange and/or prohibiting the offending party(ies) from being able to conduct business on the exchange”).

<sup>55</sup> *Compare* Bloch & Perlman (Stmt) 10 (pass codes and firewalls can manage such information-sharing concerns); Mitnick 546-47 (suggesting that firewalls or other architectural software solutions would provide sufficient protection); Correia 502-03 (firewalls “seem to work pretty well”) *with* Mirek 189 (traditional firewalls likely to be particularly ineffective because of necessary integration of supplier’s and exchange’s computer information systems), Currenex (Stmt) 2-3 (firewalls cannot ameliorate problems posed by seller consortiums, including “increased barriers to entry, leveraging effects and a net decrease in the intense level of competition that currently exists among the participating sellers”).

marketplace typically do not want their competitively sensitive information disclosed to anyone.<sup>56</sup>

## 2. Monopsony

Several participants also voiced concerns that B2Bs could allow the exercise of monopsony power.<sup>57</sup> Monopsony is “market power exercised on the buying side of the market,” power that lets a buyer or buyer group “reduce the purchase price by scaling back its purchases.”<sup>58</sup> Thus, the Horizontal Merger Guidelines provide that “[m]arket power . . . encompasses the ability of a single buyer (a “monopsonist”), a coordinating group of buyers, or a single buyer, not a monopsonist, to depress the price paid for a product to a level that is below the competitive price and thereby depress output. The exercise of market power by buyers (“monopsony power”) has adverse effects comparable to those associated with the exercise of market power by sellers.”<sup>59</sup> Under the “classical theory of monopsony,” a single buyer (or a group of firms acting as a single buyer) in the market seeks to lower the price it must pay for a given input through the means of reducing its purchases of that input.<sup>60</sup>

By no means do all B2Bs facilitate joint purchasing. Indeed, group buying is difficult to execute, some panelists stated.<sup>61</sup> Perhaps because of this, many B2Bs merely enable participants to purchase parts individually, a practice that is no more controversial than firms “using the same telephone network to purchase parts today.”<sup>62</sup>

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<sup>56</sup> See, e.g., Arnold 184; Krattenmaker 499-500; Mirek 230-31; Leahy (Stmt) 3.

<sup>57</sup> Foer (Stmt) 2 (oligopsony); Keller & Heckman (Stmt) 3; OESA (Stmt) 8 (aggregating purchase power is the biggest competitive threat B2Bs pose); Enron (Stmt) 3 (raising concern that Internet “exchange/consortium or its operators” could “unreasonably reduce input prices”).

<sup>58</sup> Areeda, Hovenkamp, & Solow, *Antitrust Law* (1995) at ¶ 574. See generally *Mandeville Island Farms v. American Crystal Sugar Co.*, 334 U.S. 219 (1948); *National Macaroni Manufacturing Ass’n v. FTC*, 345 F.2d 421 (7<sup>th</sup> Cir. 1965); *United States v. Rice Growers Ass’n*, 1986-2 Trade Cas. (CCH) ¶ 67,288 (E.D. Cal. 1986). One workshop panelist stated that in a monopsony scenario, “[t]he supply curve has to be upward sloping.” Warren-Boulton 537.

<sup>59</sup> DOJ & FTC Horizontal Merger Guidelines § 0.1 (1992, revised 1997).

<sup>60</sup> See, e.g., Roger D. Blair & Jeffrey L. Harrison, *Antitrust Policy and Monopsony*, 76 *Cornell L. Rev.* 297, 297-98, 301-303 (1991). Competitive concerns extending beyond classical monopsony were only briefly discussed during the workshop and are beyond the scope of this report.

<sup>61</sup> See, e.g., Kinney (Stmt) 11 (group buying can be difficult in practice).

<sup>62</sup> Keller & Heckman (Stmt) 5.

B2Bs can, however, be used by a buying group with adequate market share to coordinate the reduction of purchases. Such coordination could be done expressly,<sup>63</sup> through an agent,<sup>64</sup> or perhaps through consulting services that permit coordination of input purchases. One workshop participant noted that such coordination could also be facilitated by certain B2B information-sharing practices,<sup>65</sup> but this might prove difficult in practice.<sup>66</sup> Exclusivity policies that require that the group's members purchase through the group may make the exercise of monopsony power easier. Such exclusivity policies could help prevent the group's members from "cheating" by buying, through outside sources, more than they agreed to buy.<sup>67</sup> Another panelist, however, stated that such rules could contribute to achieving other efficiencies.<sup>68</sup>

Panelists stressed the importance of asking whether the buying group in question accounts for a sufficient share of the buying market such that its purchases influence the price of the inputs bought.<sup>69</sup> Indeed, identifying whether the buyer or buying group buys a sufficiently large share of the inputs in the market to make a difference should be "a first screen," according to one panelist.<sup>70</sup> For this reason, the joint purchasing of indirect inputs such as MROs is generally less likely to raise concerns than joint purchasing of direct inputs. Joint buyers are generally less likely to dominate the market for MROs, which companies in many other industries will often buy, than

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<sup>63</sup> Correia 536.

<sup>64</sup> Cf. Warren-Boulton 531 (describing two-round auctions).

<sup>65</sup> See OESA (Stmt) 8.

<sup>66</sup> See Correia 536 (noting that such coordination through signaling mechanisms might be difficult).

<sup>67</sup> See Warren-Boulton 529-30, 534. See also Hovenkamp, *Antitrust Law* (1999) at ¶ 2135.

<sup>68</sup> See Salop 534-35. See also Hovenkamp, *Antitrust Law* (1999) at ¶ 2135.

<sup>69</sup> See, e.g., Foer (Stmt) 2 (oligopsony concerns arise when "the leading buyers in an industry can utilize an electronic market place as a kind of buyers' consortium").

<sup>70</sup> Warren-Boulton 537. The Competitor Collaboration Guidelines provide that, "[a]bsent extraordinary circumstances, the [antitrust enforcement a]gencies do not challenge a competitor collaboration when the market shares of the collaboration and its participants collectively account for no more than twenty percent of each relevant market in which competition may be affected. The safety zone, however, does not apply to agreements that are per se illegal, or that would be challenged without a detailed market analysis." Competitor Collaboration Guidelines at § 4.2; see also Bloch 12 (applying 20% safety zone to monopsony concerns).

they are the market for direct inputs, which companies in few other industries may buy.<sup>71</sup>

Buyer groups driving prices down through monopsony power are not to be confused with buyer groups winning better prices through increased efficiencies, such as by enabling their suppliers to save money by selling to the group. In such cases, there may well be savings to suppliers warranting quantity discounts.<sup>72</sup> Indeed, one participant suggested that if buyers representing a small share of the buying market are collectively winning a better price, efficiencies – not monopsony – may well be responsible.<sup>73</sup>

One concern relevant to the monopsony issue is whether new entry could cure the potential injury to competition that a buying group might pose. As stated in the Competitor Collaboration Guidelines, if collaborators exercising monopsony power reduce their purchases, “they may create an opportunity for new buyers to make purchases without forcing the price of the input above pre-relevant agreement levels.”<sup>74</sup> These new entrants could thus “deter[] or counteract[]” the power of the monopsonist.<sup>75</sup>

Finally, the panelists discussed remedies that could be adopted should monopsony indeed prove a valid concern. One workshop participant suggested methods that would keep the market share of the buying group low, for example, by restricting membership in the buying group once the group’s purchases reached 30% of the market.<sup>76</sup> Another workshop participant, concerned that certain B2B information-sharing practices could facilitate monopsony coordination, suggested remedies that limit the flow of that information,<sup>77</sup> such as firewalls, anonymity, the “isolation” of management, or ensuring management’s independence.<sup>78</sup> This participant also

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<sup>71</sup> Warren-Boulton 537; Krattenmaker 498-99 (purchasing of indirect goods generally poses fewer concerns than purchasing of goods for resale). *See also supra* at Part 3.A.1.a (noting similar point with respect to information-sharing).

<sup>72</sup> *See, e.g.*, Kim 227 (discussing how equalFooting wins treatment as a national account by serving as a “virtual distributor” for small buyers); Kafka 228 (aggregation permits purchasing at truckload prices like a distributor). *Cf.* Kinney (Stmt) 11-12 (volume purchasing only works in those industries in which suppliers add capacity in large increments).

<sup>73</sup> Correia 536.

<sup>74</sup> Competitor Collaboration Guidelines at § 3.35 n.50.

<sup>75</sup> Competitor Collaboration Guidelines at § 3.35 n.50.

<sup>76</sup> Bloch & Perlman (Stmt) 12.

<sup>77</sup> OESA (Stmt) 5, 8.

<sup>78</sup> OESA (Stmt) 5.

suggested “limiting (or extending) equity ownership in the exchange,” so that, for example, sellers could gain ownership stakes in – and some control over – a buyer-owned B2B at risk for monopsony.<sup>79</sup>

### 3. Exclusion

As discussed in Part 1, many B2B e-marketplaces are being set up using the consortium model, with ownership by several of the major players in a particular industry. If these B2Bs yield substantial efficiencies, the owners’ competitors may well wish to use the B2B services. Several panelists raised the issue of whether there may be circumstances under which participant-owners of the B2B could undermine competition by denying their competitors access to the B2B or by otherwise disadvantaging those competitors in their use of the B2B. As discussed below, such treatment might raise the competitors’ costs of doing business and limit their ability to provide effective competition in markets for the goods traded on the B2B or for goods derived therefrom.

The workshop record yielded little evidence of current exclusion from B2Bs. To the contrary, several panelists stated that their B2Bs would be open to all comers.<sup>80</sup> The record, however, contains warnings regarding the potential for exclusion<sup>81</sup> and reveals widespread concern about possibilities for disadvantageous treatment of the owners’ rivals, which could take various subtle forms short of outright access denials. For example, owners might receive rebates of fees that are unavailable to their rivals.<sup>82</sup> Information might be presented in ways that give

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<sup>79</sup> OESA (Stmt) 5.

<sup>80</sup> *See* van Breen 205 (Worldwide Retail Exchange open to all retailers and suppliers); Arnold 220 (electric utility exchanges are open); Dupont 303-04 (marketplaces are totally inclusive); Verloop 346 (BuyProduce.com is “wide open”); Bloch & Perlman (Stmt) 6-7 (most B2B marketplaces plan to create “open platform[s]”).

<sup>81</sup> *See, e.g.*, Mirek 200 (citing the “real potential for owner suppliers to exclude non-owner suppliers” from the marketplace); Sandhu 295-96 (suggesting that marketplace participants may wish to condition their participation on denial of access to competitors); Heymann 368-69 (the more concentrated an industry, the more “gatekeeping” efforts evolve, reflecting differences among major participants); Glover 473 (expressing concern that small businesses could be excluded); Spectrum Meditech (Stmt) 2 (expressing concern over possibility that B2B partially owned by competitors will exclude a smaller rival).

<sup>82</sup> *Compare* Foer (Stmt) 2 (fear that owners will disadvantage outsiders by combining high user fees with rebates to owners) *and* Bhatt 287 (fear that consortium run by large suppliers will “bid” small suppliers “out”) *with* Worldwide Retail Exchange (Stmt) 5 (Worldwide Retail Exchange “will be open, on equal terms, to all -- suppliers and purchasers alike. User fees will be equal, regardless of any ownership position in the WWRE.”).

preference to marketplace owners.<sup>83</sup> Discriminatory operating rules or disadvantageous access to electronic interchange standards could leave rivals with reduced functionality or higher costs.<sup>84</sup> As one comment, discussing currency exchanges, explained:

It is also important to examine the "rules of the game" to determine whether the exchange has imposed rules that subtly tilt the playing field in favor of the owners/sellers. For example, there are exchanges that are theoretically open to a multitude of players, but close bidding after a limited number of bids have been received. These systems thus favor those sellers with better integration into the exchange's systems, typically those with the greatest ownership stake in the exchange itself. By arbitrarily limiting bidding or engaging in display bias, such exchanges . . . are using the purportedly neutral "rules" to exclude potential competitors (e.g. non-exchange partners) and avoid competing on price or another objective standard. . . . It would also be very easy for the top market players to manipulate smaller market participants by blocking access or offering access on unequal terms.<sup>85</sup>

Denying or disadvantaging competitors in their access to a B2B e-marketplace could raise their costs or maintain them above levels that otherwise would prevail.<sup>86</sup> Typically, though, this alone has not been viewed as an antitrust violation.<sup>87</sup> Rather, antitrust analysis generally treats

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<sup>83</sup> *See, e.g.*, Kafka 195-96 (recognizing importance that information not be skewed but stressing that bias is not inherent in seller ownership or governance); Walsh 365-68 (B2Bs must not withhold information from buyers or bias the presentation in a way that prevents buyers from being empowered); Mitnick 550 (presentation bias a legitimate issue).

<sup>84</sup> OESA (Stmt) 6; Internet Public Policy Network (Stmt) 1; Keller & Heckman (Stmt) 3-4, 8. *But cf.* Phillips 324 (rivalry among large suppliers that own an exchange will ensure adoption of neutral rules).

<sup>85</sup> Currenex (Stmt) 3.

<sup>86</sup> In addition to denying the rival the cost-saving benefits of B2B participation, exclusionary treatment may impair a rival's ability to continue dealing with suppliers or customers who are committed to a given B2B. *See* Bloch & Perlman (Stmt) 6; OESA (Stmt) 6. Consequently, "exclusivity" provisions of the type discussed in the next section, which work to bind a supplier or purchaser to a particular B2B, may raise the costs of any rival barred from using that B2B.

<sup>87</sup> *See, e.g.*, *Lie v. St. Joseph Hosp.*, 964 F.2d 567, 570 (6<sup>th</sup> Cir. 1992) (loss of personal income experienced by a physician excluded from a hospital not sufficient to demonstrate injury to competition); *Bhan v. NME Hosps.*, 929 F.2d 1404, 1414 (9<sup>th</sup> Cir.) (exclusion of one nurse anesthetist from one hospital not enough to demonstrate actual detrimental effects on competition), cert. denied, 502 U.S. 994 (1991).

exclusion as an antitrust problem when it harms competition, not merely competitors.<sup>88</sup>

That approach has long been followed by the courts. When the Supreme Court has condemned agreements among competitors to deny access to their jointly controlled activities, harm to competition has been clearly demonstrable. For example in *Associated Press v. United States*, where the Court condemned a rule that permitted members to block competing newspapers from using the wire service, it concluded that the arrangements for blocking access were “designed to stifle competition” and were “aimed at the destruction of competition,” and that they had the effect of “seriously . . . limit[ing] the opportunity of any new paper to enter” numerous local markets.<sup>89</sup> Moreover in *United States v. Terminal Railroad Ass’n*, the Court imposed requirements to ensure equal access to a railroad association’s terminal facilities, after finding that, as a practical matter, it was “impossible for any railroad company to pass through, or even enter St. Louis . . . without using the facilities entirely controlled by the Terminal Company.”<sup>90</sup> In a case involving single-firm conduct, the Court condemned an electric utility’s refusal to sell or transmit electric power to proposed municipal systems that threatened to “erod[e] its monopolistic position.”<sup>91</sup>

On the other hand, the courts have not hesitated to reject challenges to denials or limitations on access in settings when they have not found harm to competition. For example, the U.S. Court of Appeals for the Tenth Circuit found no illegality when a subsidiary of Sears, Roebuck & Company, proprietary issuer of Discover Card, was denied membership in Visa USA; it determined that the evidence was insufficient to show market power, observed that the exclusionary rule could have efficiency justifications, stressed that “[t]he Sherman Act ultimately must protect competition, not a competitor,” and concluded that no harm to consumers had been

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<sup>88</sup> In some settings exclusionary agreements among competitors may be per se unlawful group boycotts. *See, e.g.,* *Northwest Wholesale Stationers v. Pacific Stationary & Printing*, 472 U.S. 284, 294, 298 (1985) (requiring a showing of “market power or unique access to a business element necessary for effective competition” as a prerequisite for per se condemnation and noting that in per se unlawful group boycotts “the practices were generally not justified by plausible arguments that they were intended to enhance overall efficiency and make markets more competitive”); *Federal Trade Commission v. Toys “R” Us*, 221 F.3d 928 (7<sup>th</sup> Cir. 2000). This Report concentrates on the factors relevant for determining when exclusionary B2B conduct might be anticompetitive under the rule of reason. The legal principles delineating per se unlawful exclusion are beyond its scope.

<sup>89</sup> 326 U.S. 1, 13, 18-19 (1945).

<sup>90</sup> 224 U.S. 383, 397, 411 (1912).

<sup>91</sup> *Otter Tail Power Co. v. United States*, 410 U.S. 366, 378 (1973) (invoking Section 2 of the Sherman Act, 15 U.S.C. § 2).

shown.<sup>92</sup> In a case involving computer reservation systems (“CRSs”), in many ways forerunners of today’s B2Bs, claims that two airline owners of proprietary computer reservation systems unilaterally had denied their competitors reasonable access to an “essential facility” by charging airlines \$1.75 per booking were rejected on grounds that the CRS operators lacked power to eliminate competition in the downstream air transportation market.<sup>93</sup> A potentially more troubling set of allegations about CRS operations—that flights of owning airlines were listed on the CRS screens before their competitors’ flights—had been resolved years earlier, when the Civil Aeronautics Board promulgated regulations requiring non-discriminatory treatment.<sup>94</sup>

In recent years, a considerable body of scholarship has sought to make operative the mandate that antitrust analysis focus on harm to competition.<sup>95</sup> That literature presents a useful framework for analysis of the competitive effects of conduct that raises rivals’ costs and thereby impairs downstream competition. It examines, sequentially, two markets: the market for inputs, from which the rival is excluded, and the market for outputs, in which the rivals’ ability to compete is impaired.

In the context of B2Bs, analysis would focus first on the market for services rendered by the B2B. In that connection it would consider the extent of the disadvantage that likely would ensue from denying or limiting rivals’ access to the B2B, as well as the substitutes to which the

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<sup>92</sup> SCFC ILC, Inc. v. Visa USA, Inc., 36 F.3d 958, 969-72 (10<sup>th</sup> Cir. 1994), cert. denied, 515 U.S. 1152 (1995).

<sup>93</sup> Alaska Airlines v. United Airlines, 948 F.2d 536 (9<sup>th</sup> Cir. 1991), cert. denied, 503 U.S. 977 (1992). The case involved allegations that each defendant had violated Section 2 of the Sherman Act. The court indicated that standards for assessing access denial under Section 2 are more stringent than those required under Section 1. *Id.* at 542 (citing Phillip Areeda, *Essential Facilities: An Epithet in Need of Limiting Principles*, 58 Antitrust L.J. 841, 844-45 (1990)).

<sup>94</sup> 14 C.F.R. Part 255 (establishing requirements for the operation by air carriers of computer reservation systems “so as to prevent unfair, deceptive, predatory, and anticompetitive practices in air transportation”). The reviewing court rejected a challenge to the rule against presentation bias under an analysis focused on deception, without reaching the competition issues. *See United Air Lines v. Civil Aeronautics Board*, 766 F.2d 1107, 1112-13 (7<sup>th</sup> Cir. 1985). It also rejected challenges to a rule against CRS price discrimination and to a companion rule prohibiting deletion of information about rivals’ connecting flights, finding that the Board’s competition analysis was not arbitrary or capricious. *Id.* at 1113-16. The court viewed the governing transportation statute as “essentially a copy of section 5 of the Federal Trade Commission Act,” the transportation statute’s “progenitor.” *Id.* at 1112, 1114.

<sup>95</sup> For a comprehensive introduction to raising-rivals’-cost theory, *see* Thomas G. Krattenmaker & Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals’ Costs to Achieve Power over Price*, 96 Yale L. J. 209 (1986).

disadvantaged firms could turn to avoid or mitigate the disadvantage. But this would only inform us about harm to the disadvantaged competitor. To show harm to competition, we would need to consider the likely impact on competition in the markets in which the excluded firms participate. Finally, if anticompetitive harm were likely, analysis would ask whether the access denial was reasonably necessary for achieving procompetitive benefits that likely would offset the anticompetitive harm.<sup>96</sup>

For example if a consortium of widget manufacturers formed a B2B for purchasing widget components and excluded an up-and-coming, new widget manufacturer from buying through their B2B, the analysis would inquire first how much this raised the excluded firm's costs and whether the firm could turn to substitute sources to minimize any harm. It then would inquire into the likely competitive consequences downstream, in the market for widgets. Even if the excluded firm's costs rose, there might be no downstream effect if competition in the widget market were otherwise vigorous. Ultimately, the inquiry would focus on the likely overall competitive effect in the widgets market, taking account of both anticompetitive harms and procompetitive benefits from the exclusion.

These inquiries are likely to be highly fact-specific in application. Indeed, exclusionary incentives will not even be present in many settings. A B2B owned and operated by firms or individuals independent of those who buy or sell through that marketplace may lack any incentive to exclude or disadvantage any participants. In contrast, other B2Bs, such as those owned or operated by consortia of industry members may have incentives to exclude.<sup>97</sup> Where exclusion is an issue, certain key factors may shape the analysis. Questions to focus upon include:

(1) Is the B2B the only way the product – or adequate substitutes for it – can be bought or sold at comparable prices? Alternatively, could another B2B or a private network based on Internet infrastructure readily be used, or are there offline markets that could be used instead? Would the alternatives be as efficient, or does the excluding B2B offer special advantages?

If the excluded rivals can readily reach suppliers or buyers through alternative mechanisms at comparable costs, they can avoid the harm. Several panelists, however, suggested that strong network efficiencies in an incumbent marketplace might make alternatives unsatisfactory.<sup>98</sup> Their theme was familiar: the 1996 Staff Report following

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<sup>96</sup> *Cf.* Competitor Collaboration Guidelines at § 3.36 (discussing analysis of efficiencies in competitor collaborations outside the context of exclusionary conduct).

<sup>97</sup> *See* Clark 364 (consortium B2Bs are more likely than others to skew functionality in favor of the owners, but few are up and running now).

<sup>98</sup> *See, e.g.,* Mirek 200-01 (real potential to exclude non-owners from marketplace altogether in light of network effects that could make marketplace an essential facility); OESA

the FTC's Hearings on Global and Innovation-Based Competition similarly reasoned that network efficiencies "magnify any disadvantages of exclusion and tend to burden intersystem competition" and concluded that "demand-side scale economies associated with networks warrant a heightened degree of scrutiny in assessing denials of access to joint venture membership."<sup>99</sup> That scrutiny is likely to be highly fact-intensive, requiring consideration of the extent to which buyers and sellers remain available to support cost-effective B2B alternatives and the extent to which other trading mechanisms can substitute for B2B e-marketplaces. As explained in one comment, the latter inquiry may entail a look at the types of services offered, the interchangeability of use for participants, and the cross-elasticity of demand between alternative trading mechanisms.<sup>100</sup>

(2) Will effects on rivals' costs be deterred or counteracted by entry of alternative marketplaces or by counter-strategies that rivals might pursue? As discussed above in Part 1.C.7, the workshop record on the ease, and hence the curative power, of entry was mixed. Some argued that entry would quickly provide ready B2B alternatives for disadvantaged rivals.<sup>101</sup> Others questioned the ease of entry in these markets.<sup>102</sup>

(3) If the B2B were in fact the only way the product or adequate substitutes could be bought or sold at comparable prices, would denial or limitation of access give the B2B's participants the power to raise or maintain the price of the products they sell above what

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(Stmt) 6-7 (dominant B2B could become an essential facility; network effects must be taken into account).

<sup>99</sup> *Anticipating the 21<sup>st</sup> Century: Competition Policy in the New High-Tech, Global Marketplace* (1996) ("1996 FTC Staff Report"), ch.9 at 8. Similarly, the courts in some settings have recognized that excluding a rival from a joint venture benefitting from substantial network efficiencies may harm competition. *See, e.g.,* *Thompson v. Metropolitan Multi-List, Inc.*, 934 F.2d 1566 (11<sup>th</sup> Cir. 1991), *cert denied*, 506 U.S. 903 (1992); *United States v. Realty Multi-List*, 629 F.2d 1351 (5<sup>th</sup> Cir. 1980).

<sup>100</sup> *See* Keller & Heckman (Stmt) 6 (recommending that Internet sites be evaluated like other retail formats in defining the relevant product market).

<sup>101</sup> *See, e.g.,* Harting 372-73 ("[C]oncerns that owners will manipulate the presentation of data or prices are overblown. These are ruthlessly competitive markets" since competitor B2Bs face "low" entry barriers and since "buyers can search, almost for free, for other venues where they can purchase"; a marketplace that excluded participants or biased data presentation "would be punished very, very quickly"). *See supra* Part 1.C.7.

<sup>102</sup> *See, e.g.,* Clark 363 (difficult to start an independent B2B once a consortium B2B is already present); Brodley 542, 576 (same); Blankenhorn (Stmt). *See supra* Part 1.C.7 and *infra* Part 3.B.3.

otherwise likely would prevail? This would be a function of the role of the disadvantaged participants in maintaining downstream competition. If the excluded rivals were important to maintain effective downstream competition, exclusionary conduct that significantly raised their costs would cause anticompetitive harm. The analysis here would consider factors such as downstream market concentration, theories of unilateral and coordinated anticompetitive effects in the downstream markets, and downstream entry, as well as any unique competitive significance of the excluded firms. The workshop record did not delve into the likelihood of anticompetitive effects in any particular downstream market, and this would have to be analyzed in fact-specific terms.

(4) What are the efficiencies of the exclusion? How might exclusion enhance competition? One panelist stated that some B2Bs seek to differentiate their marketplace from competitors by limiting participants to select, “qualified sellers.”<sup>103</sup> Another panelist stressed that some differences in treatment may be warranted as a means of dealing with free riding by non-owner participants.<sup>104</sup> In practice, of course, the significance and cognizability of efficiency claims would be analyzed in the context of particular factual settings and would include consideration of any practical, significantly less anticompetitive alternatives to the exclusion.<sup>105</sup>

## **B. Market for Marketplaces**

### **1. The Nature of Marketplace Competition**

To this point, analysis has focused on possible competitive concerns in the markets for goods traded on, or derived from goods traded on, B2Bs. Now we shift our focus to the emerging competition for the provision of B2B services. Just as competition issues can arise in connection with other business-support activities, such as commercial telephone service or commercial Internet access, competition in the market for marketplaces raises its own set of antitrust concerns.<sup>106</sup> B2Bs provide and charge for business services, and antitrust has a role in

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<sup>103</sup> Loevy 306.

<sup>104</sup> Mitnick 550-51. For example, it might be suggested that firms that begin participation only after a B2B has proven successful should pay a higher membership fee than a firm that bore greater risk by joining earlier. *See generally* 1996 FTC Staff Report, ch. 9 at 23-26.

<sup>105</sup> *Cf.* Competitor Collaboration Guidelines at § 3.36(b).

<sup>106</sup> *See, e.g.,* Bloch & Perlman (Stmt) 11 (distinguishing antitrust concerns in market for marketplaces from those in markets for products in which the marketplace participants operate).

maintaining competition in the market for marketplaces.<sup>107</sup>

The workshop demonstrated that we are in an early, but potentially critical stage of development of that market. Determinations made at the outset may shape B2B competition for years ahead. That competition likely will be affected both by the nature and magnitude of network effects in the market for marketplaces and by marketplace practices employed by the incumbents.

Specifically, several panelists expressed concern that B2Bs may undermine the development of effective B2B competition by improperly encouraging or requiring buyers or sellers, including those holding B2B ownership interests, to deal with them to the exclusion of others.<sup>108</sup> As discussed in Part 1.C.7 above, B2Bs may use a variety of carrots (profit interests or rebates or revenue-sharing devices in return for commitments to achieve certain volume levels) or sticks (minimum volume or minimum percentage requirements, bans on investment in other B2Bs, up-front membership fees or required software investments, or pressure on suppliers and buyers) to capture business. These exclusivity practices impose switching costs in terms of benefits to forgo or penalties to pay if a participant chooses to use or to support another B2B. In light of the potentially powerful network effects at work in B2B contexts, *see supra* Part 1.C.7, exclusivity practices warrant close attention as potential catalysts for market domination. Of course, to the extent they also give rise to efficiencies, the practices may prove procompetitive overall, but that merely highlights the need for taking a close look.<sup>109</sup>

Some panelists warned that even without overt exclusivity practices, over-inclusive B2B ownership by a consortium of large industry members could raise similar concerns.<sup>110</sup> To the

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<sup>107</sup> References to the “market for marketplaces” are not intended to suggest that the relevant antitrust market necessarily is limited to B2B e-marketplaces. In theory, more traditional alternatives, such as EDI connections, could remain competitive constraints. Delineating the relevant antitrust market would proceed case-by-case under general market definition principles. *See* Competitor Collaboration Guidelines at § 3.32; Horizontal Merger Guidelines at §§ 1.1 and 1.2.

<sup>108</sup> *See, e.g.*, Simkins 409; First 553; Cooper 571; Currenex (Stmt)1; OESA (Stmt) 6-7.

<sup>109</sup> B2Bs, of course, also use practices other than exclusivity to attract volume – they try to offer the best services or functionality. *See, e.g.*, Heymann 388; Simkins 408. Such practices are procompetitive and do not raise antitrust concerns.

<sup>110</sup> *See, e.g.*, Brodley 542 (“to the extent that . . . dominant factors of the industry have ownership in the exchange, then they’re going to be less interested in participating in another exchange . . . [and this] could restrain the ability for other exchanges to develop”), 576; Baker 579-80 (over-inclusive ownership in incumbent B2B will make it hard for rival to get going); Foer (Stmt) 2 (“By being designed to be overly large, the joint venture may make competition with it

extent that ownership interests yield incentives that result in *de facto* exclusivity, much the same analysis outlined below may apply in evaluating the formation or consolidation of consortia B2Bs. However, as one panelist explained, the likely effects of the incentives derived from holding an ownership interest could vary from setting to setting and would have to be explored through factual inquiry.<sup>111</sup>

## 2. Case Law

The exclusivity practices at issue may attach horizontally among competitors who establish a B2B or they may attach vertically to suppliers or customers of the B2B founders. Different strains in the law have developed for the different settings, but in each instance the ultimate inquiry is the actual or likely effect on competition. In the horizontal context, an agreement among competitors to refrain from dealing with a rival to their B2B potentially raises issues as a concerted refusal to deal. Courts have reached divergent conclusions in different factual settings as to likely effects on competition of such horizontal arrangements. For example, when four major motion picture studios established a pay television network and agreed to supply certain films exclusively to that network for nine months, the mechanism for pricing the films and the 9-month exclusivity requirement were found likely to harm competition.<sup>112</sup> Moreover, an agreement among members of the National Football League to prohibit NFL owners from holding ownership interests in teams in other major professional sports leagues was found unlawful under the rule of reason.<sup>113</sup> On the other hand when a group of soft drink bottlers entered a joint venture to build and operate a facility to produce plastic bottles and agreed to purchase 80% of their bottle requirements from their joint venture, the court found no evidence of actual or

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impossible.”).

<sup>111</sup> See *Mitnick* 547 (stressing importance of asking where ownership incentives lead); see also *Krattenmaker* 546 (analogizing the necessary inquiry to merger analysis).

<sup>112</sup> *United States v. Columbia Pictures Industries*, 507 F. Supp. 412 (S.D.N.Y. 1980) (preliminarily enjoining the joint venture), *aff’d mem.*, 659 F.2d 1063 (2d Cir. 1981). The U.S. Court of Appeals for the 10<sup>th</sup> Circuit recently registered similar concerns in reinstating allegations based on an alleged group boycott. There, a group of archery manufacturers, in joining to form a new trade show, had agreed to withhold their business from the only competing trade show. The court concluded that the facts alleged by plaintiffs stated claims against the agreement under Sections 1 and 2 of the Sherman Act. See *Full Draw Productions v. Easton Sports, Inc.*, 182 F.3d 745 (10<sup>th</sup> Cir. 1999).

<sup>113</sup> *North Am. Soccer League v. National Football League*, 670 F.2d 1249 (2d Cir.), cert. denied, 459 U.S. 1074 (1982).

probable harm to competition.<sup>114</sup>

To the extent the exclusivity practices are purely vertical, in that they attach only to B2B users who are customers or suppliers of the B2B owners, the line of cases analyzing vertical exclusive dealing arrangements under Section 1 of the Sherman Act and Section 3 of the Clayton Act should be added to the mix. As with the examples of exclusion discussed in Section A.3. of this Part, the focus is on harm to competition from the exclusionary effects. Thus, in *Tampa Electric Co. v. Nashville Coal Co.*, 365 U.S. 320 (1961), the Supreme Court framed the inquiry in terms of:

weigh[ing] the probable effect of the [exclusive dealing] contract on the relevant area of effective competition, taking into account the relative strength of the parties, the proportionate volume of commerce involved in relation to the total volume of commerce in the relevant market area and the probable immediate and future effects which pre-emption of that share of the market might have on effective competition therein.<sup>115</sup>

Similarly, Judge Boudin, writing for the U.S. Court of Appeals for the First Circuit, has described

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<sup>114</sup> *Sewell Plastics, Inc. v. Coca-Cola Co.*, 720 F. Supp. 1196, 1217-20 (W.D.N.C. 1989) (finding insufficient market power to cause undue foreclosure and concluding that defendants' supply contracts were reasonably justified means for achieving procompetitive purposes), *aff'd per curiam*, 1990-2 Trade Cas. (CCH) ¶ 69,165 (4<sup>th</sup> Cir. 1990), cert. denied, 498 U.S. 1110 (1991).

As discussed in n.88 above, some concerted refusals to deal are per se illegal. *See also* *U.S. Healthcare, Inc. v. Healthsource, Inc.*, 986 F.2d 589, 593-94 (1<sup>st</sup> Cir. 1993). The line between per se and rule of reason analysis in these contexts is particularly murky, *compare* *Columbia Pictures*, 507 F. Supp. at 427-30 (exclusivity restriction likely a per se unlawful group boycott) *with* *Worthen Bank & Trust Co. v. National BankAmericard Inc.*, 485 F.2d 119 (8<sup>th</sup> Cir. 1973) (exclusivity rule preventing banks issuing credit cards in one credit card network from becoming members in a competing network not per se unlawful), cert. denied, 415 U.S. 918 (1974), and raises issues beyond the scope of this Report.

<sup>115</sup> *Tampa Electric Co. v. Nashville Coal Co.*, 365 U.S. 320, 329 (1961). As four Justices explained in a subsequent, concurring opinion, “[e]xclusive-dealing arrangements may, in some circumstances, create or extend market power of a supplier or the purchaser party to the exclusive-dealing arrangement, and may thus restrain horizontal competition.” *Jefferson Parish Hospital District v. Hyde*, 466 U.S. 2, 45 (1984) (O’Connor, J. concurring). The concurring Justices advocated an analysis focused on “the number of sellers and buyers in the market, the volume of their business, and the ease with which buyers and sellers can redirect their purchases or sales to others.” *Id.*

the “ultimate issue in exclusivity cases” as that of “foreclosure and its consequences.”<sup>116</sup> Factors identified by appellate courts for analyzing these competitive consequences include the degree of exclusion flowing from the restraint,<sup>117</sup> its duration and terminability,<sup>118</sup> the percentage of the market foreclosed and other indicia of the likely effect on competitors’ ability to operate,<sup>119</sup> the availability of alternative access routes to supplies or customers,<sup>120</sup> rivals’ ability to employ countermeasures to defeat the attempted exclusion,<sup>121</sup> and, ultimately, the likely impact of raising rivals’ costs on competition in a relevant market,<sup>122</sup> including consideration of any procompetitive justifications.<sup>123</sup> In appropriate settings, when a B2B has monopoly power or a dangerous probability of achieving monopoly power, exclusivity practices could also give rise to an inquiry under the proscriptions against monopolization and attempted monopolization in Section 2 of the

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<sup>116</sup> U.S. Healthcare, 986 F.2d at 596.

<sup>117</sup> For example, a minimum purchase contract sometimes has been viewed as less restrictive than a full-requirements contract. *See* Barry Wright Corp. v. ITT Grinnell Corp., 724 F.2d 227, 237 (1<sup>st</sup> Cir. 1983) (Breyer, J.). Some courts have rejected complaints based on the offering of incentives to deal exclusively, but others have condemned them as the economic equivalent of prohibitions. For a detailed discussion of this case law, *see* Willard K. Tom, David A. Balto, & Neil W. Averitt, *Anticompetitive Aspects of Market-Share Discounts and Other Incentives to Exclusive Dealing*, 67 *Antitrust L.J.* 615, 630-36 (2000) (concluding that “the case law does not forbid anticompetitive exclusive dealing contracts only when they embody a binding ‘requirement’ of exclusivity” or “only when they embody an undertaking to deal 100 percent ‘exclusively’”) and David Balto, *Networks and Exclusivity: Antitrust Analysis to Promote Network Competition*, 7 *Geo. Mason L. Rev.* 523, 563-71 (1999).

<sup>118</sup> *See, e.g.*, Omega Environmental, Inc. v. Gilbarco, Inc. 127 F.3d 1157, 1163-64 (9<sup>th</sup> Cir. 1997), cert. denied, 525 U.S. 812 (1998); U.S. Healthcare, 986 F.2d at 598; Roland Machinery Co. v. Dresser Industries, Inc., 749 F.2d 380, 394-95 (7<sup>th</sup> Cir. 1984) (Posner, J.).

<sup>119</sup> *See, e.g.*, US Healthcare, 986 F.2d at 596; Retina Assocs. v. Southern Baptist Hosp., 105 F.3d 1376, 1384 (11<sup>th</sup> Cir. 1997).

<sup>120</sup> *See, e.g.*, CDC Technologies, Inc. v. Idexx Laboratories, Inc., 186 F.3d 74 (2d Cir. 1999); Gilbarco, 127 F.3d at 1163.

<sup>121</sup> *See, e.g.*, U.S. Healthcare, 986 F.2d at 595-96.

<sup>122</sup> *See, e.g.*, Roland Machinery, 749 F.2d at 394 (requiring a showing that probable effect of the exclusion is to raise price above the competitive level or otherwise injure competition).

<sup>123</sup> *See, e.g., id.* at 395. The Supreme Court has described several potential efficiencies. *See* Standard Oil Co. v. United States, 337 U.S. 293, 306-07 (1949).

Sherman Act.<sup>124</sup>

A recent series of consent decrees entered by the antitrust enforcement agencies reflects heightened concerns with both horizontal and vertical exclusivity practices in settings exhibiting strong network effects. For example, the United States challenged the “FTD Only” program, which provided a set of economic rewards to florists who used the FTD floral delivery network exclusively. Incentives for maintaining exclusivity included awards of voting stock, increased local advertising, and reduced fees.<sup>125</sup> The parties consented to an enforcement order prohibiting FTD from offering any financial incentives or rewards to members who refrain from participating in competing wire associations.<sup>126</sup>

The FTC issued a complaint charging that RxCare of Tennessee, Inc., the state’s leading pharmacy network, had effectively penalized members for participating in competing, discount networks.<sup>127</sup> RxCare’s rules included a “Most Favored Nation” provision that required members accepting a lower reimbursement rate outside the RxCare network to accept the same lower rate on their RxCare contracts. Because RxCare represented a large portion of most pharmacies’ business, the complaint alleged, the rule made participation in other networks unacceptable and inhibited the establishment or expansion of competing pharmacy networks. The resulting consent order barred use of “Most Favored Nation” clauses in RxCare’s participation agreements.<sup>128</sup>

The United States also challenged a rule barring participating banks in MAC, a major ATM network, from purchasing ATM processing services from others. According to the complaint, the rule was an unlawful tying arrangement and a means for maintaining monopoly power in the market for regional ATM network access. Control over processing, it was alleged, permitted MAC to withhold the connections necessary for its member banks to also participate in other networks, making it substantially more difficult for those other networks to develop.<sup>129</sup> The

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<sup>124</sup> See, e.g., *United States v. Microsoft Corp.*, 87 F. Supp.2d 30, 53 (D.D.C. 2000), *appeal docketed*, No. 00-5212 (D.C. Cir. June 13, 2000).

<sup>125</sup> *Petition by the United States for an Order to Show Cause, United States v. FTD Corp.*, 1996-1 Trade Cas. (CCH) ¶ 71,395 (E.D. Mich.1995). The conduct was challenged as violating a modified, 1956 consent decree resolving allegations that FTD, the largest flowers-by-wire association, had violated Section 1 of the Sherman Act by prohibiting members from using other wire clearinghouses. *Id.*

<sup>126</sup> *United States v. FTD Corp.*, 1996-1 Trade Cas. (CCH) ¶ 71,395 (E.D. Mich.1995).

<sup>127</sup> *In re RxCare of Tennessee, Inc.*, 121 F.T.C. 762 (1996).

<sup>128</sup> *Id.* at 766-69.

<sup>129</sup> 59 Fed. Reg. 29711, 24712-14 (1994).

consent decree prohibited MAC from tying network access and ATM processing services and from forbidding its members from participating in other ATM networks.<sup>130</sup>

In addition, the United States brought an enforcement action against licensing arrangements alleged to have exclusionary effects in the market for personal computer operating systems. According to the complaint, Microsoft's licensing practices foreclosed rivals' access to the original equipment manufacturer ("OEM") channel and lessened competition in the operating system market.<sup>131</sup> The consent agreement barred Microsoft Corporation, among other things, from entering "per processor" licenses, *viz.*, licenses that require OEMs to pay royalties on all PCs using a particular microprocessor type, whether or not they use Microsoft's operating system, and from entering license agreements containing minimum commitments.<sup>132</sup>

### 3. Potential Competitive Concerns

In 1995 the FTC conducted extensive hearings concerning competition policy in high-tech markets. After reviewing the relevant testimony, case law, and analytical literature and noting the pronounced advantage that network effects can give an incumbent operator, the ensuing 1996 FTC Staff Report cautioned that conduct that could contribute to achieving dominance warrants heightened scrutiny in settings with prominent network effects and switching costs.<sup>133</sup> Substantial network efficiencies and consumer switching costs make it difficult for an entrant to start small, compete effectively and grow to become a significant factor in the market. In high-tech network settings, this means that me-too or incremental competition or mere shading of the price may not suffice; competition "for a future technology" may predominate at the expense of competition "in the present technology."<sup>134</sup> However, it may take time to develop advances sufficient to overcome the advantages of a dominant incumbent's network, and in the interim, the incumbent may be able to exercise market power.<sup>135</sup>

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<sup>130</sup> United States v. Electronic Payment Servs., 1994-2 Trade Cas. (CCH) ¶ 70,796 (D.Del. 1994). In a case decided at an earlier stage in ATM network development, a court rejected a competing network's challenge to a MAC rule prohibiting the use of rivals' ATM cards at MAC automatic teller machines. Treasurer, Inc. v. Philadelphia Nat'l Bank, 1988-1 Trade Cas. (CCH) ¶ 67,943 (D.N.J.), *aff'd mem.*, 853 F.2d 921 (3d Cir. 1988).

<sup>131</sup> 59 Fed. Reg. 42845, 42846-49 (1994).

<sup>132</sup> United States v. Microsoft Corp., 1995-2 Trade Cas. (CCH) ¶ 71,096 (D.D.C. 1995).

<sup>133</sup> 1996 Staff Report, ch. 9 at 13-14, 29 (discussing interface standards).

<sup>134</sup> *See id.* at ch. 9, 12 n.34, *quoting* testimony of William F. Baxter.

<sup>135</sup> *See id.* at ch 9, 12-13 (explaining that market power may prove unusually enduring in network settings).

The need for heightened scrutiny of restrictions on outside purchasing or selling seems fully applicable to B2Bs. As a leading economist explained at the workshop, once a marketplace monopoly is attained, it may be very difficult to dislodge.<sup>136</sup> Under these circumstances, antitrust review should focus closely on the harms and benefits of the practices used to achieve exclusivity, that is, to keep buyers or suppliers away from competing B2Bs. In particular circumstances, such practices may cause substantial anticompetitive harm even if they rely on incentives rather than requirements and stop short of full exclusivity.<sup>137</sup>

Exclusivity practices – and ownership interests giving rise to *de facto* exclusivity – affect the extent to which participants in a B2B are able to support or patronize a rival B2B or other alternative trading system. Tying the participants to a single B2B may undermine the ability of alternatives to compete, effectively increasing the B2B’s market power.<sup>138</sup> Indeed, adding exclusivity to a setting already characterized by substantial network effects could “tip” the market in favor of a given B2B and impede development of alternatives.<sup>139</sup> As workshop testimony

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<sup>136</sup> Salop 573. *See also* Carl Shapiro & Hal R. Varian, *Information Rules* 190 (1999) (“Let there be no doubt: building your own base of users for a new technology in the face of an established network can be daunting.”).

<sup>137</sup> *See* Balto, *supra* note 117, at 563 (“penalty contracts, discounts, rights of first refusal, or ‘most favored nation’ provisions may create strong incentives that may effectively replicate exclusive arrangements”). Tom, Balto & Averitt, *supra* note 117, at 621-30; *cf.* Department of Justice and Federal Trade Commission *Antitrust Guidelines for the Licensing of Intellectual Property* at § 4.1.2 (“Exclusivity may be achieved by an explicit exclusive dealing term in the license or by other provisions such as compensation terms or other economic incentives. . . . A license that does not explicitly require exclusive dealing may have the effect of exclusive dealing if it is structured to increase significantly a licensee’s cost when it uses competing technologies.”). Similarly, the Department of Justice and Federal Trade Commission *Statements of Antitrust Enforcement Policy in Health Care* explain, “The Agencies will determine whether a physician network joint venture is exclusive or non-exclusive by its physician participants’ activities, and not simply by the terms of the contractual relationship.” *Id.* at Statement 8.A.3.

<sup>138</sup> Under the Competitor Collaboration Guidelines, exclusivity requirements are one of the factors applied in interpreting the market power of a collaboration. *Id.* at §§ 3.33-3.34. As Section 3.34(a) explains, “In general, competitive concern likely is reduced to the extent that participants actually have continued to compete, either through separate, independent business operations or through membership in other collaborations, or are permitted to do so.”

<sup>139</sup> *See, e.g.,* Carl Shapiro, *Exclusivity in Network Industries*, 7 *Geo. Mason L. Rev.* 673 (1999) (“exclusivity provisions can interact with network effects to create substantial barriers to entry”). “Would-be early adopters of the new network are faced with what can be a prohibitive opportunity cost of joining the new network: cutting themselves off from the larger, established network,” and the expectation that exclusivity rules will prevent some from joining the new

reflected, power in the market for marketplaces raises several competitive concerns.

An obvious possibility is higher price. B2Bs charge for their services, and a B2B with market power could impose supracompetitive prices.<sup>140</sup> Normally, that market power would be limited by participants' ability to shift to other B2Bs, private Internet-based networks, their own EDI systems, or offline trading mechanisms.<sup>141</sup> To the extent that exclusivity impedes such shifting – either by preventing use of alternatives or preventing the alternatives from developing – it buttresses the B2B's market power.

Another concern is less efficient service. A B2B with market power may be able to rest on its laurels and offer less functionality.<sup>142</sup> More subtly, it could be able to tilt its service in favor of its owners rather than its customers. For example, a seller-owned B2B with market power might be able to structure its services in ways to favor sellers, such as by designing auctions in a way to maximize prices.<sup>143</sup> Competition from other B2Bs could prevent this, but exclusivity might impair that competition.

Reduced innovation is another possibility. Panelists generally agreed that innovation will be a key component of B2B competition.<sup>144</sup> Some cautioned that removing the spur of competitive rivalry could slow the process,<sup>145</sup> and observed that this could follow from exclusivity

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network reduces incentives for others to join. *Id.* at 677-78. The article also provides a useful summary of economic literature explaining how exclusive dealing provisions can elevate entry barriers in markets characterized by traditional, supply-side scale economies. *Id.* at 678-79.

<sup>140</sup> *See e.g.*, Baker 579-80 (exercise of monopoly power in market for marketplaces could tax transactions); Bloch & Perlman (Stmt) 11.

<sup>141</sup> *See* Dupont 319-20 (exercise of power limited by ability to buy and sell independently); Harting 416 (same).

<sup>142</sup> *See* Bloch & Perlman (Stmt) 11.

<sup>143</sup> *See* Salop 523-25 (rules of auctions can be manipulated so as to yield higher prices); Sandhu 256-57 (suppliers may find means to retard price discovery mechanisms); Currenex (Stmt) 1 (supplier-owners may tilt the exchange in their favor).

<sup>144</sup> *See, e.g.*, Krattenmaker 545 (exchanges will compete by offering better software).

<sup>145</sup> *See* Whinston 430 (marketplace monopoly may lead to less innovation); First 552-53 (competition among marketplaces in offering innovative services crucial); Brodley 542 (unnecessary standardization of marketplace platform might limit innovation by buyers or sellers who link to the platform).

provisions.<sup>146</sup> Others, however, questioned whether this was a significant concern in the B2B context; they argued that B2B innovation would likely develop on a cross-industry basis, so that B2B competition within any given industry would not likely be essential for innovative activity.<sup>147</sup> Both arguments potentially have some validity in different fact contexts -- core software, for example might develop across industries, while the customizing and linking together of various services might be more industry-specific – but it may be too early to speculate as to their relative weight.

Moreover, exclusivity could sustain any existing market power over time by making entry more difficult. As described in Part 1.C.7, the record on B2B entry barriers is mixed. Some argue that entry will eliminate all competitive concerns; others contend that it will occur too slowly to maintain competition.<sup>148</sup> It is clear, though, that to the extent network efficiencies or other scale economies are reinforced with exclusivity provisions tending to deprive an entrant of the buyers or suppliers it needs to succeed, entry is likely to be less effective in deterring or counteracting anticompetitive effects.

#### **4. Analytical Framework and Guideposts**

How then might we assess the competitive consequences of exclusivity? The inquiry should focus on the impact of a given practice or ownership structure on the ability to form effective competing marketplaces and the consequences this bears for competition in the market for marketplaces.

An assessment of potential anticompetitive harm could begin with an examination of the nature of the practices at hand and an inquiry as to how restrictive they actually are: how severely do they limit the ability of buyers and sellers to support rival B2Bs? For example, some panelists stressed that minimum commitment requirements typically have been relatively modest and

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<sup>146</sup> See OESA (Stmt) 6-7 (exclusivity practices could thwart innovative B2Bs).

<sup>147</sup> See Rule 561-62 (no need to worry about B2B innovation because it will develop on a cross-industry basis, so there will be lots of innovation competition); Henry 562 (no real fears about innovation competition at this point).

<sup>148</sup> Compare Jasinowski 556 (entry will erase concerns about undue standardization or monopoly rents) with Simkins 409-10 (even if the market ultimately corrects problems, energyLeader may still feel the short-term consequences, and since “we were just born in January [2000], the short term is very important to us”).

unlikely to have much effect.<sup>149</sup> Then there may be need to focus on the specific activities in which a B2B will engage and to assess the role likely to be played by exclusivity in the particular factual circumstances.<sup>150</sup> Finally, an analysis would inquire if the exclusivity practices or ownership structure leave available sufficient buying, selling, or other support to sustain alternative marketplaces capable of maintaining competition.<sup>151</sup> If not, they may well cause anticompetitive harm.

Of course, we then need to consider any procompetitive benefits attributable to exclusivity. Clearly, network effects are likely to be an important source of efficiency in B2B contexts, and an analysis that failed to consider that greater B2B size may generate benefits as well as possible competitive concerns would be incomplete.<sup>152</sup> To the extent that exclusivity contributes to realizing network efficiencies, therefore, it could be beneficial. That reasoning, however, is not dispositive, and a deeper examination would pose some probing questions:

(1) How strong and pervasive are the network efficiencies in a particular industry context? Network efficiencies may begin to diminish at some level or may not be strong enough to justify reduced competition.<sup>153</sup> Absent overwhelming network economies, there may be ample room for B2B marketplace competition. Indeed, most panelists believed that more than one B2B per industry supply chain would survive. *See supra* Part 1.C.7. Even if strong network efficiencies would eventually drive rival B2Bs to seek consolidation, however, there may be significant benefit in maintaining competition to select the surviving network.<sup>154</sup>

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<sup>149</sup> *See, e.g.*, Kinney 220-21; Shridharani 224; Perlman 568 (minimum purchase requirements “so soft that they’re very unlikely . . . to have any consequence”).

<sup>150</sup> *See, e.g.*, Correia 569-70 (urging that analysis look beyond market share to consider what the B2B is doing and how it is structured).

<sup>151</sup> *See* Perlman 569 (asking if there are enough potential participants outside the exchange so that other exchanges can form); Cooper 571 (asking if there are enough people outside to support a market).

<sup>152</sup> *See, e.g.*, Rule 559-61.

<sup>153</sup> First 553-54 (don’t assume network effects inexhaustible or justify loss of competition). *See generally* Krattenmaker 546 (finding efficiencies in ownership by industry members “at least to some level”).

<sup>154</sup> *See* 1996 FTC Staff Report, ch. 9 at 27 (discussing relevant merits of achieving standards through the winnowing process of competitive rivalry as opposed to cooperative agreements).

(2) Are the exclusivity practices reasonably necessary for achieving the network efficiencies? Given that a B2B with strong network efficiencies would hold inherent attractions for buyers and sellers, an analyst may question whether exclusivity requirements are reasonably necessary. Similar questions could be asked with respect to large-scale consortium ownership: as one panelist explained, network efficiencies derive from broad *participation*, but this does not necessarily require broad *ownership*.<sup>155</sup>

(3) Would interoperability between competing B2B marketplaces permit achievement of comparable network efficiencies without sacrificing competition? Stated differently, would open access to marketplace interfaces serve as a “practical, significantly less restrictive” alternative?<sup>156</sup> Some panelists indicated that, at least in theory, interoperability might be an alternative means of achieving network efficiencies.<sup>157</sup> At this point, however, its practicality remains unclear. As discussed in Part 1.C.8, there is little inter-exchange communication now;<sup>158</sup> there are hopes that it quickly can be developed;<sup>159</sup> but there may be significant hurdles – such as potential property rights in transaction records<sup>160</sup> – still to be surmounted. Moreover, there may be potentially significant issues as to competitive effects. The likely nature and extent of competition among interoperable marketplaces and the likely impact of interoperability on incentives to develop and improve B2Bs would have to be further explored.

Exclusivity practices may also be supported by other efficiencies.<sup>161</sup> Some panelists observed that they may be reasonably necessary to persuade investors that the B2B will indeed

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<sup>155</sup> Baker 579-80.

<sup>156</sup> See Competitor Collaboration Guidelines at § 3.36(b).

<sup>157</sup> Rule 559-60 (interconnection will enable realization of network efficiencies); see also Stojka 408 (noting consumer benefits from interoperability).

<sup>158</sup> Stojka 408.

<sup>159</sup> van Breen 205-06, 219.

<sup>160</sup> Chen 235-37 (businesses regard transactional records as trade secrets; may need exchange-to-exchange cooperation to sort out).

<sup>161</sup> It sometimes may be difficult to assess the full range of potential efficiencies because of the nascent nature of many of the services that B2Bs may grow to offer. Although an evaluation of efficiencies should seek to take account of all likely procompetitive benefits, the general caution against “vague or speculative” efficiency claims, Competitor Collaboration Guidelines at § 3.36(a), bears repetition here.

attract – and keep – enough trading volume to be viable.<sup>162</sup> Similarly, some suggested that consortium ownership by major industry members was a means for ensuring sufficient usage to spread fixed costs over a large volume of transactions.<sup>163</sup> Others cited reduced selling costs from negotiating a blanket price for a given volume commitment rather than re-negotiating price for each increment of service.<sup>164</sup> One panelist suggested that prohibiting investments in competing marketplaces may be necessary to align the incentives of B2B owners and that minimum purchase requirements may be needed to avoid “cherry picking” on particular contracts to the disadvantage of the B2B.<sup>165</sup> Another indicated that in some settings exclusivity may facilitate creation of industry-wide communication standards.<sup>166</sup>

The workshop was not intended to resolve these issues, and it is unsurprising that the record does not permit a full-scale evaluation of the significance or legitimacy of the various efficiency claims for exclusivity. That must await fuller investigation in actual factual settings where inquiry can be made as to whether particular efficiency claims are verifiable and potentially procompetitive; whether costs are incurred that reduce the claimed benefits; whether similar efficiencies could be attained through practical, significantly less restrictive means; and whether the cognizable efficiencies would be likely to offset the potential for anticompetitive harm.<sup>167</sup>

The fact-specific nature of these inquiries makes specific conclusions as to the competitive consequences of the various exclusivity practices impossible. In some settings they may raise competitive concerns, and in others they may be procompetitive. Nonetheless, some guideposts can be planted. All else held equal (including the ability to achieve efficiencies and innovations), competitive concerns are magnified (i) the greater the market share of the B2B owners; (ii) the greater the restraints on participation outside the B2B; and (iii) the less the interoperability with other B2Bs. This does not mean that industry consortia B2Bs are presumptively unlawful or that minimum volume commitments cannot be imposed. It does suggest that high levels of industry ownership or substantial minimum purchase requirements will likely draw a closer look. On the other hand, all else held equal (including the level of likely anticompetitive harm), competitive concerns are reduced the greater the contribution of exclusivity to achieving procompetitive

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<sup>162</sup> See Bloch & Perlman (Stmt) 9.

<sup>163</sup> See, e.g., Gray 207-08; Bloch & Perlman (Stmt) 8; and *supra* Part 1.C.4. Another panelist, however, responded that the showing to this point has not been convincing. Brodley 575-76.

<sup>164</sup> Kinney 220-21.

<sup>165</sup> Perlman 567-68; see generally Salop 534-35 (noting possibilities for free riding).

<sup>166</sup> See OESA (Stmt) 7 n.10.

<sup>167</sup> Competitor Collaboration Guidelines at §§ 3.36-3.37.

benefits. As with most areas of antitrust analysis, there is no magic formula for evaluating competition in the market for marketplaces, only a framework of analysis designed to weave complex and sometimes-conflicting tendencies into an assessment of likely competitive effects.

## APPENDIX A: WORKSHOP PANELISTS

| <u>NAME</u>                   | <u>AFFILIATION</u>   | <u>DATE</u> |
|-------------------------------|--|-------------|
| John <b>Allgaier</b>          | Director, Services & Supplies Purchasing,<br>General Mills         | 6/29/00     |
| Jon <b>Arnold</b>             | CIO, Edison Electric Institute                                     | 6/29/00     |
| Stephen <b>Attanasio</b>      | President & CEO, WIZNET, Inc.                                      | 6/29/00     |
| William J. <b>Baer</b>        | Arnold & Porter  | 6/30/00     |
| Jonathan B. <b>Baker</b>      | American University, Washington School of Law                      | 6/30/00     |
| Nailesh A. <b>Bhatt</b>       | Founder & Director, BulkDrugs.com                                  | 6/29/00     |
| Dale <b>Boeth</b>             | Vice President of Strategic Development,<br>PurchasePro.com, Inc.  | 6/29/00     |
| Gerard <b>van Breen</b>       | Executive Vice President, Royal Ahold                              | 6/29/00     |
| Joseph <b>Brodley</b>         | Boston University School of Law                                    | 6/30/00     |
| David Y. <b>Chen</b>          | Co-founder & CEO, GeoTrust   | 6/29/00     |
| Tim <b>Clark</b>              | Senior Analyst, Jupiter Communications                             | 6/30/00     |
| Christopher G. <b>Cogan</b>   | Founder, Chairman & CEO, GoCo-op                                   | 6/29/00     |
| Timothy <b>Cooney</b>         | Co-founder & President, Ventures4Sale.com, Inc.                    | 6/29/00     |
| Mark <b>Cooper</b>            | Research Director, Consumer Federation of<br>America               | 6/30/00     |
| Edward <b>Correia</b>         | Latham & Watkins   | 6/30/00     |
| Andra P. (Andy) <b>Dupont</b> | Director, Electronic Market Channels, Dow<br>Chemical Company      | 6/29/00     |
| Harry <b>First</b>            | Antitrust Bureau Chief, New York State Attorneys<br>General Office | 6/30/00     |

**APPENDIX A**

| <b><u>NAME</u></b>             | <b><u>AFFILIATION</u></b>   | <b><u>DATE</u></b>   |
|--------------------------------|---|----------------------|
| Albert A. <b>Foer</b>          | President, American Antitrust Institute                               | 6/30/00              |
| Gary <b>Fromer</b>             | Vice President, New Business and Partner Solutions, SAP America, Inc. | 6/29/00              |
| Jere <b>Glover</b>             | Office of Advocacy, Small Business Administration                     | 6/30/00              |
| Rod <b>Gray</b>                | CFO, Petrocosm Corporation  | 6/29/00 &<br>6/30/00 |
| Margaret <b>Guerin-Calvert</b> | Principal, Economists Incorporated                                    | 6/30/00              |
| Gina <b>Haines</b>             | Co-founder & Senior Vice President Operations, FacilityPro.com        | 6/30/00              |
| Morgan C. <b>Harting</b>       | Manager, E-Commerce Group, KPMG Consulting                            | 6/30/00              |
| Roxann E. <b>Henry</b>         | Howrey, Simon , Arnold & White  | 6/30/00              |
| Nicholas P. <b>Heymann</b>     | Senior Vice President, Equity Research, Prudential Securities, Inc.   | 6/30/00              |
| Captain Kurt <b>Huff</b>       | Supply Corps, United States Navy                                      | 6/29/00              |
| Jerry J. <b>Jasinowski</b>     | President & CEO, National Association of Manufacturers                | 6/30/00              |
| Steven J. <b>Kafka</b>         | Analyst, eBusiness Trade, Forrester Research, Inc.                    | 6/29/00              |
| Angie <b>Kim</b>               | President & Chief Customer Officer, equalFooting.com, Inc.            | 6/29/00              |
| Sam E. <b>Kinney</b>           | Co-founder & Executive Vice President, FreeMarkets, Inc.              | 6/29/00              |
| Leah <b>Knight</b>             | Research Director, B2B Internet Marketplaces Worldwide, Gartner Group | 6/29/00              |
| Jay <b>Knoll</b>               | Senior Staff Counsel, Detroit Diesel Corporation                      | 6/29/00              |

**APPENDIX A**

| <b><u>NAME</u></b>            | <b><u>AFFILIATION</u></b>  | <b><u>DATE</u></b> |
|-------------------------------|--|--------------------|
| Thomas <b>Krattenmaker</b>    | Mintz Levin Cohn Ferris Glovsky & Popeo  | 6/30/00            |
| Charles <b>Libicki</b>        | Co-Principal, Interface Logic Systems, Inc.                                      | 6/29/00            |
| Hal <b>Loevy</b>              | Vice President Global Marketing & Partnerships, SGSonsite.com                    | 6/29/00            |
| David <b>Lucking-Reiley</b>   | Assistant Professor of Economics, Vanderbilt University                          | 6/30/00            |
| Catherine L. <b>Mann</b>      | Senior Fellow, Institute for International Economics                             | 6/30/00            |
| Alex <b>Mashinsky</b>         | Founder & Vice Chairman, Arbinet   | 6/29/00            |
| Lori <b>Mirek</b>             | President & CEO, Currenex, Inc.  | 6/29/00            |
| Joel M. <b>Mitnick</b>        | Brown & Wood LLP   | 6/30/00            |
| Timothy K. <b>Muris</b>       | George Mason University  | 6/30/00            |
| Robert <b>Parker</b>          | Vice-President, B2E Commerce Strategies, AMR Research, Inc.                      | 6/30/00            |
| Scott P. <b>Perlman</b>       | Mayer, Brown & Platt   | 6/30/00            |
| Charles <b>Phillips</b>       | Managing Directory, Enterprise and Internet Software, Morgan Stanley Dean Witter | 6/29/00            |
| Phillip A. <b>Proger</b>      | Jones, Day, Reavis & Pogue   | 6/30/00            |
| Roy S. <b>Roberts</b>         | Co-founder, Chairman & CEO, M-Xchange.com  | 6/30/00            |
| Charles F. (Rick) <b>Rule</b> | Covington & Burling  | 6/30/00            |
| Steven <b>Salop</b>           | Georgetown University Law Center   | 6/30/00            |
| Harpal S. <b>Sandhu</b>       | President & CEO, Integral Development Corp.                                      | 6/29/00            |
| Kaushik <b>Shridharani</b>    | Managing Director, Business E-commerce, Bear Stearns & Co, Inc.                  | 6/29/00            |

**APPENDIX A**

| <b><u>NAME</u></b>           | <b><u>AFFILIATION</u></b>   | <b><u>DATE</u></b> |
|------------------------------|---|--------------------|
| Joel E. <b>Simkins</b>       | Vice President, energyLeader.com  | 6/30/00            |
| Dwayne <b>Spradlin</b>       | Vice President of Corporate Development,<br>VerticalNet, Inc.   | 6/29/00            |
| Patrick <b>Stewart</b>       | President & CEO, MetalSite, L.P.  | 6/29/00            |
| Tim <b>Stojka</b>            | Chairman & CEO Commerx, Inc., Developer of<br>PlasticsNet   | 6/30/00            |
| Michael <b>Sullivan</b>      | Chief Operating Officer, HotOfftheWire.com  | 6/29/00            |
| Shyam <b>Sunder</b>          | James L. Frank Professor of Accounting,<br>Economics and Finance, School of Management,<br>Yale University                          | 6/30/00            |
| Robert <b>Tarkoff</b>        | General Counsel and Senior Vice President of<br>Corporate Development, CommerceOne  | 6/29/00            |
| Gretchen A. <b>Teagarden</b> | Director, B2B E-Commerce, Salomon Smith<br>Barney, Inc.   | 6/29/00            |
| Robert <b>Verloop</b>        | Vice-President of Sales & Marketing,<br>BuyProduce.com  | 6/30/00            |
| Mark L. <b>Walsh</b>         | President & CEO, VerticalNet, Inc.  | 6/30/00            |
| Rick <b>Warren-Boulton</b>   | MICRA   | 6/30/00            |
| Andrew B. <b>Whinston</b>    | Director of the Center for Research in Electronic<br>Commerce, Red McCombs School of Business,<br>The University of Texas at Austin | 6/30/00            |
| Laura A. <b>Wilkinson</b>    | Clifford Chance Rogers & Wells LLP  | 6/30/00            |
| Alvin <b>Zaad</b>            | CommerceOne   | 6/29/00            |

## **APPENDIX B: WRITTEN STATEMENTS**

### **NAME**

### **AFFILIATION**

Dana **Blankenhorn**

Dana Blankenhorn

Robert E. **Bloch**  
Scott L. **Perlman**

Mayer, Brown & Platt

Dale **Boeth**

Vice President of Strategic Development,  
PurchasePro.com, Inc.

Matthew **Bye**

Matthew Bye

David A. **Clanton**,  
Sergio A. **Leiseca**  
David J. **Lang**  
Heiko E. **Burow**

Baker & McKenzie

Peter **de la Cruz**  
Sheila **Millar**

Keller & Heckman, LLP

Currenex, Inc.

Currenex, Inc.

Ernst & Young

Ernst & Young

Albert A. **Foer**

American Antitrust Institute

Agnes **Foy**

CapCLEAR Ltd.

Morgan C. **Harting**

Manager, KPMG Consulting

Lawrence **Hecht**

President, Internet Public Policy Network

James F. **Henry**

CPR Institute for Dispute Resolution

Jerry **Jasinowski**

President, National Association of  
Manufacturers

## APPENDIX B

| <u>NAME</u>   | <u>AFFILIATION</u>   |
|---|--|
| Sam <b>Kinney</b>   | Co-founder & Executive Vice President,<br>FreeMarkets, Inc.  |
| Neil <b>De Koker</b>  | Managing Director, Original Equipment<br>Suppliers Association   |
| Marc L. <b>Fleischaker</b><br>D. Reed <b>Freeman, Jr.</b><br>David H. <b>Evans</b>  | Arent Fox Kintner Plotkin & Kahn   |
| Steve <b>Leahy</b>  | NRGline  |
| Lara J. <b>Leibman</b><br>Richard S. <b>Shapiro</b>   | Manager, Government Affairs - the Americas,<br>Managing Director, Government Affairs - the<br>Americas,<br>Enron Corporation |
| Charles <b>Libicki</b>  | Interface Logic Systems, Inc.  |
| Hal <b>Loevy</b>  | Vice President Global Marketing &<br>Partnerships, SGSONSITE.com   |
| Charles <b>Phillips</b><br>Mary <b>Meeker</b>   | Morgan Stanley Dean Witter   |
| Arthur <b>Sculley</b><br>William <b>Woods</b>   | Partner, Sculley Brothers, LLC<br>CEO, Bermuda Stock Exchange  |
| Joel <b>Simkins</b>   | Vice President, energyLeader.com   |
| Bruce D. <b>Sokler</b><br>Thomas G. <b>Krattenmaker</b><br>Fernando R. <b>Laguarda</b><br>Amy L. <b>Bushyeager</b><br>Ruth T. <b>Yodaiken</b><br>Ghita <b>Harris-Newton</b> | Mintz Levin Cohn Ferris Glovsky & Popeo<br>(Comments of the Worldwide Retail<br>Exchange)                                    |
| Fred <b>Sollish</b>   | Executive Director, Open Buying on the<br>Internet   |

**APPENDIX B**

**NAME**

**AFFILIATION**

Gretchen A. **Teagarden**

Director, B2B E-Commerce, Salomon Smith  
Barney, Inc.

M. David **Wilder**

General Counsel, Spectrum Meditech, Inc.