Brocade/McDATA: Structural Presumptions Didn’t Tell the Whole Story

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Introduction

The antitrust pundits have created quite a buzz, pronouncing that the current U.S. political climate is ideal for high market share mergers and acquisitions in concentrated industries. Cited as evidence are the clearance by the Department of Justice of the Whirlpool/Maytag merger and the proposed merger of the only two satellite radio companies, Sirius and XM. Have the U.S. antitrust enforcement agencies retreated, adopting a laissez-faire attitude toward deals that might have been unthinkable in an earlier era?

* The authors represented Brocade Communications Systems in the FTC merger review. The views expressed in this article are solely those of the authors and do not necessarily reflect the views of the merger parties or any other advisors to the merger parties.


The answer is clearly no, at least when gauged by the Federal Trade Commission’s (“FTC”) careful review and ultimate clearance of the acquisition of McDATA Corporation (“McDATA”) by Brocade Communications Systems (“Brocade”). At first blush this appeared to be a classic high market share transaction in a concentrated industry. However, it was cleared not because of benign neglect at the FTC, but instead because the FTC continues to apply the Merger Guidelines to the facts of each individual transaction, rather than applying Section 7 in a formulaic way. Once the facts had been uncovered by Staff and the Commission, the full picture revealed a vibrantly competitive market and customers who enthusiastically embraced the deal.

When the transaction was announced in August 2006, an initial take was that this was a “3-to-2” deal, and as we all know, Baby Foods stands for the proposition that 3-2 deals should
be stopped.\(^5\) Industry analysts claimed that the merger would leave Brocade with a market share ranging anywhere from 65 to 85 percent, depending upon the market definition.\(^6\) The acquisition attracted significant interest from both inside and outside of the antitrust bar. There was a well-publicized FTC/DOJ clearance battle that initially kept the deal from going to the FTC; market shares and concentration indicated a problem; and rumors of a likely antitrust challenge were actively disseminated by arbitrageurs and journalists. Yet, after a Second Request and ensuing four-month investigation, the Commission voted 4-0, with one abstention, to clear the deal. Why would the FTC clear this transaction without condition? The answer lies in the facts.

**Fibre Channel Switches: A Relevant Product Market?**

Brocade and McDATA both sell fibre channel ("FC") switches—devices using the fibre channel protocol to link enterprise storage devices and servers (referred to as “Storage Area Networks” or “SANs”) that control the flow of data to and from the storage device and server, which then transmits the data to users. Historically, large enterprises have been the primary customers of this technology and use FC SANs for fast retrieval of their mission critical data.

FC switches are generally classified by industry analysts into two categories: “directors” and “fixed switches.” The differences between the two involve the number of ports and switch features.

In the director segment, Brocade, McDATA, and Cisco Systems were the primary vendors with approximately one-third of the director revenues each. Importantly, Cisco had entered this segment in 2003, achieving its 33 percent share after only two to three years. In addition, QLogic offered a stackable switch that functions like a director and had recently introduced a director class switch as well. In fixed switches, Brocade commanded approximately 70 percent of all revenues, while McDATA had approximately 15 percent. QLogic, the other fixed switch vendor, maintained a consistent 10 percent share. During the course of the merger review, Cisco announced its plans to build its own fixed switches as well (a helpful development, indeed).

Thus, at most, if the market included only FC switches (or was further subdivided into “directors” and “fixed switches”), there were just three or four participants. The market shares were high: in the director segment, the merging parties had a combined 65 percent “market share,” and in the fixed switch segment, the parties had a combined 85 percent.

Consequently, with high shares and only three or four participants in each switch type, the McDATA acquisition seemed a likely candidate for an FTC challenge, particularly in the fixed switch segment, if the FTC considered such switches a relevant product market.\(^7\) For-

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\(^7\) The parties suggested that substitutability between fixed switches and directors meant that fixed switches could not comprise separate product markets. Some customers could substitute multiple fixed switches in place of directors, while others could replace multiple fixed switches with a single director. See Merger Guidelines, § 1.11 (“In considering the likely reaction of buyers to a price increase, the Agency will take into
fortunately for the parties, a static snapshot of market shares is only the beginning of modern antitrust analysis. As in many transactions cleared under previous administrations, the static view here did not present a true picture of this dynamic market. Large and sophisticated customers saw substantial efficiencies from the merger, and the documents and testimony from the merger parties and other industry participants presented a compelling, forward-looking story of increasing competition from new players and technologies.

Dynamic Market: The Effect of Potential Disruptive Entry

From the beginning, the parties maintained (and third parties confirmed) that the data storage market was changing rapidly. In particular, the parties argued that Ethernet would soon become a significant disruptive technology in the storage market. This was not a clear-cut instance, however, where win-loss data or current industry literature would have confirmed the existence of a larger market. Ethernet was not yet competitive with fibre channel. Why, then, in the end, did the Commission allow the transaction to proceed?

In large part, the parties believe that the Commission was persuaded by the fact that industry participants and customers were already making substantial Ethernet investments, thus showing current economic acceptance of emerging technology. The parties’ own internal documents predicted that Ethernet technology would become competitive within two years. Moreover, Cisco and others had invested billions of dollars in Ethernet technology, and customers themselves were demanding introduction of this technology for data storage.

Thus, it was not a question of whether Ethernet technology would compete with fibre channel technology but when. There were no technological, distribution or reputation concerns with Ethernet—it is a standards-based, robust technology used for data transfer in other areas of the network. Thus, all of the evidence demonstrated that when introduced, Ethernet would be a formidable competitor for the parties’ fibre channel products. Indeed, storage solutions based on other technologies (e.g., networked attached storage or NAS) were being offered by OEMs side-by-side with FC for certain applications that had been the exclusive domain of FC just a few years ago.

The “when” question, though, was more difficult. Under a traditional Merger Guidelines analysis, entry is relevant only if the parties can demonstrate that entry will occur and constrain pricing within two years. The evidence, however, was mixed on the question of when Ethernet would become competitive:

9 While Ethernet is ubiquitous on the client side of the server, Ethernet had historically not penetrated the storage side of the server where higher speeds and low latency are critical. While 1 gigabit Ethernet was competitive with fibre channel for certain applications, the move from 1 to 10 gigabit Ethernet presented a dramatic improvement in Ethernet technology that made it competitive with fibre channel for all applications.

10 “The Agency generally will consider timely only those committed entry alternatives that can be achieved within two years from initial planning to significant market impact,” Merger Guidelines § 3.2, supra note 4.
there was evidence, for example, that for years the technology had been predicted to enter the market, to no avail. The Commission Staff asked the right questions and queried why the parties believed, and what evidence supported, that entry was in fact likely within the Merger Guidelines’ time horizon.

Important to this analysis was customer testimony and third-party activity. Customers told Staff, the parties believe, that they anticipated Ethernet becoming competitive with fibre channel within a few years, and as a result they were already adjusting their purchasing decisions for storage technology to account for this market development. This, in turn, was forcing the merger parties to react to Ethernet even though it had not yet been introduced. Third-party activity confirmed customers’ statements. A number of companies had already made substantial investments in Ethernet technology and had created public collateral, announcing that they would soon have competitive Ethernet alternatives in the market. Thus, despite the uncertainty surrounding the question of “when,” the FTC was likely left with a choice: either accept the fact that industry participants had invested enormous sums in Ethernet technology as substantial evidence of likely and timely entry, or instead, substitute its own judgment for that of market participants, who had put their money where their collective mouths were.

Customer Reaction / Efficiencies Go Hand in Hand

In many transactions, the parties assert a myriad of merger-specific efficiencies, claiming that customers will ultimately benefit from improved products and lower prices. However, in this merger review, the benefits to OEM and end-user customers were much more tangible, concrete, and pronounced than in other deals, helping explain why customers actively supported the McDATA acquisition. As in any contested merger proceeding, winning requires not only a very good “story,” but also credible witnesses in support. Just as in Whirlpool/Maytag, here there was no strong customer opposition to the transaction, due in large part to the efficiencies created by the deal.11

OEM Reaction

FC switches are component parts of larger storage solutions sold by OEMs to end-users such as financial institutions and retailers. The top three OEMs (IBM, HP, and EMC) on average purchase about 75 percent of Brocade’s FC switches. OEMs have considerable power over fibre channel switch providers like Brocade, because they have direct contact with end-users and can use that relationship to push alternate technological solutions at the expense of FC solutions and can also favor one switch manufacturer over another. The OEMs also serve as gatekeepers for new entrants. New entrants cannot effectively reach end-users without relying on the OEMs, and the OEMs will only qualify an additional supplier if they believe there is sufficient demand for the new products to justify the increase in their own qualification and support costs.12

11 Notwithstanding the district court decisions in FTC v. Arch Coal, 329 F. Supp. 2d 109 (D.D.C. 2004), and United States v. Oracle Corp., 331 F. Supp. 2d 1098 (N.D. Cal. 2004), dismissing testimony from customers opposing the mergers in each of those cases, customer testimony—in opposition to or in support of a transaction—remains critical in a merger review.

12 Absent OEM support, it would be difficult for entrants to achieve sufficient sales to be profitable. See Merger Guidelines § 3.3, supra note 4 (“Entry is unlikely if the minimum viable scale is larger than the likely sales opportunity available to entrants. Minimum viable scale is the smallest average annual level of sales that the committed entrant must persistently achieve for profitability at premerger prices.”).
OEMs could easily qualify additional switch manufacturers and shift enough sales to the new entrants to ensure their success. This factor meant that QLogic’s relatively small share of past sales undervalued its potential competitive significance going forward. So as a starting point, OEMs (like the large retailers in Whirlpool/Maytag) did not think higher post-merger prices would be a realistic concern.

However, there was also a positive reason for these OEMs to favor the deal: reduced qualification and testing costs. For data storage networking systems, OEMs bear the cost of ensuring that component products function correctly and are compatible with other components. Furthermore, OEMs are responsible for servicing installed products and troubleshooting when issues arise. In industry parlance, these services are referred to broadly as the “qualification” and “testing” processes. These costs can reach the tens of millions of dollars every year, for each OEM.

Commission Staff appropriately queried whether OEMs could simply decline to qualify a vendor’s products and achieve the same cost savings. As the OEMs reportedly explained to the Commission, however, they could not do so without potentially losing sales to other OEM competitors because the downstream storage market is so competitive. If, for example, an OEM chose to stop qualifying McDATA products, that OEM would surrender the ability to sell to customers with a strong McDATA installed base of fibre channel SANs (because, again, without interoperability, it is impossible to “mix SAN environments”), effectively shutting that OEM out of competition for such McDATA customers. Thus, because of this downstream competition, OEMs were forced to absorb the costs of qualifying and supporting any switch vendor with an installed base of customers, even if the OEMs would have collectively preferred to reduce their costs by having one fewer supplier.

The significant reduction in qualification time, cost, and burden was a major reason for the OEMs to support the deal. However, Commission Staff was appropriately concerned. OEMs were only one set of customers, and perhaps the OEMs’ incentives to support the transaction were not aligned with consumer welfare. Commission Staff queried: could the OEMs enjoy the reduced qualification costs stemming from the transaction and simply “pass on” any price increase to end-users? The reaction of end-users was therefore critical. As the FTC learned, the transaction provided substantial efficiencies for end-user customers as well.

End-User Reaction

Even though the fibre channel industry is young, it suffers from some critical flaws that render it unlikely to survive as a long-term solution for data transfer. Fibre channel is a proprietary technology in a world that is moving to standards-based technology. Thus, technology offered by Brocade, McDATA and the other primary market participant, Cisco, did not interoperate with each other. An FC switch from McDATA could not be placed in a Brocade network and vice versa.

For end-users, this lack of interoperability created headaches of epic proportions. Large companies (again, the primary purchasers of fibre channel technology) often maintain multiple networks—some containing Brocade fabrics and others containing McDATA fabrics. Why do they have products from both? Because these large companies often make decisions at the departmental level (e.g., the Los Angeles branch of Citibank) or have acquired other companies that used other networks (e.g., Merrill Lynch, a McDATA shop, purchased several smaller firms that were Brocade shops). Maintaining multiple network infra-
The additional employee cost for supporting the SAN over time often exceeds the initial purchase price of the switch itself. Companies with multiple networks, for example, cannot transfer underutilized Brocade hardware into a McDATA network, quite simply because the switch will not work there.

These problems accelerated customer demand for standards-based Ethernet technology, which, as discussed above, would eventually eliminate most interoperability concerns. However, end-user customers reportedly told the FTC that prior to future Ethernet deployment, the McData/Brocade merger would result in significant interoperability benefits because the merger would enable Brocade to quickly upgrade customers’ existing FC networks and allow interoperability between installed Brocade and McDATA switches. When balanced against the initial purchase price of a fibre channel switch or director, customers told the FTC that the cost savings associated with native interoperability would greatly lower the total costs of fibre channel product ownership for customers with mixed fibre channel SAN environments.

Importantly, customers were thus able to confirm the existence of an efficiency that was merger specific and would automatically inure to their collective benefit. There was no “pass through” issue: once the merger was consummated, end users would receive substantial cost savings through interoperability.

**What Did the Data Say?**

At the same time the FTC was absorbing the customers’ reactions to the deal, it began to review the documents and data presented by the parties. As one would expect, the FTC needed to determine whether historical sales and discounting data could be used to demonstrate likely future competitive harm. Brocade and McDATA did not directly sell to end-users. OEM retailers such as HP and IBM act as the primary seller to an end-user purchasing an entire SAN. In larger, competitive transactions, usually involving the more expensive director products, the switch manufacturers were asked to discount their products so that the OEMs could offer a lower price for the overall storage solution to the end-user. The parties kept several years of data relating to these discounts.

The available data supported the contention that the parties were not uniquely competively situated such that the merger would reduce pricing pressure. The data tended to show that Brocade offered similar discounts when it was bidding against Cisco alone, compared to when it was bidding against Cisco and McDATA, and the data further showed that Brocade did not offer any more substantial discounts when it competed against McDATA alone. Thus, at best, the data helped allay fears that the merger would reduce discounting, and at worst, the data was inconclusive enough that the FTC did not find a case it could bring on the basis of that data.

In addition, in selling their FC switches the parties were competing in an input market. Their ability to alter the competitive dynamic for end-users was limited—OEMs controlled the customer relationship. Thus, the parties often had no idea where their products were being sold or for what applications they were being used. As a result, the transaction did not increase their ability to price discriminate.

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13 David T. Sheffman, *Buyers, Market Power, and Market Definition* (Ch. 6), in *The Economics Of The Antitrust Process* (Malcolm B. Coate and Andrew N. Kleit ed., 1996). The chapter provides an excellent discussion as to how to analyze market definition where demand for the product is derived from the final demand for the completed product.
Thus, following the merger the OEMs could continue to discipline the pricing of FC switches by credibly threatening to cut back on purchases of FC switches and selling more non-FC switch-based storage solutions to end-users.

**Elephant in the Data Room**

One of the most significant issues that arose in the merger review involved Cisco. Cisco did not look like the other FC switch vendors. It had direct relationships with almost every end-user and the capacity and sales resources to win every FC switch opportunity.

Cisco had not only entered and gained one-third of sales of FC directors in two to three years, but it was also the most significant vendor of Ethernet switches, the technology of the future. Customers, analysts, and OEMs all confirmed that Cisco’s combined FC switch and Ethernet presence would likely undermine any attempt by Brocade to sustain a post-merger price increase or reduction in output or innovation. Cisco’s growing presence thus made any coordinated or unilateral effects story untenable.

**Another Flailing Firm Defense That Worked**

The parties could not—and did not—contend that McDATA was a failing firm. The evidence did not support such a contention, and under the strict standards of the Merger Guidelines, there was no doubt that a failing firm defense would not succeed.14 McDATA was not in bankruptcy, nor was it close to that status. That said, McDATA’s impaired competitive significance was nonetheless an important factor in the antitrust analysis.

Under General Dynamics, evidence rebutting the ordinarily-presumed relevance of historical market shares is very important in evaluating the likely future competitive effects of a merger.15 Here, there was significant evidence that McDATA had made a number of missteps that had deteriorated its position in the market. McDATA announced a time frame for upgrading its technology to a higher speed and missed its targets. In addition, McDATA had built up a number of products through acquisitions on different platforms, but it had failed to consolidate those platforms onto one, resulting in high costs and several quarters in a row of missed earnings targets. FC switches are expensive and have a relatively long life-span. They are properly considered durable goods that demand ongoing service, support, and upgrading. They manage critical data for large firms that are generally considered risk averse.

As a result, the parties were able to demonstrate to the Commission that McDATA’s troubles had created substantial difficulties for the company going forward. Its historically high shares of sales were not indicative of its ongoing competitive significance. There was substantial evidence that even some of good-faith efforts to elicit reasonable alternative offers of acquisition of the assets of the failing firm that would both keep its tangible and intangible assets in the relevant market and pose a less severe danger to competition than does the proposed merger; and 4) absent the acquisition, the assets of the failing firm would exit the relevant market.”

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14 The Merger Guidelines § 5.1, supra note 4, impose tough requirements to meet the failing firm defense: “(1) the allegedly failing firm would be unable to meet its financial obligations in the near future; 2) it would not be able to reorganize successfully under Chapter 11 of the Bankruptcy Act; 3) it has made unsuccessful

15 United States v. General Dynamics Corp., 415 U.S. 486, 502 (1974) (past market shares in coal industry were not accurate indicators of future ability to produce).
McDATA’s most important customers had begun to shift sales to other firms, for fear of being dependent on a company with questionable long-term competitive viability.

There can be no doubt that such evidence was compelling in this case. With high historic market shares in a concentrated industry, it was crucial for the parties to demonstrate that the market tomorrow would not look like the market yesterday. McDATA’s fragile position gave the FTC significant comfort that McDATA’s past performance was not indicative of its likely future competitive importance.

**Conclusion**

The Brocade/McDATA acquisition is another example of why antitrust counsel must conduct a Merger Guidelines analysis, rather than advise clients on their chances of regulatory success based simply upon high (or low) market shares in a particular “market.” The facts still control, and the correct market analysis often is not immediately obvious. The Brocade/McDATA deal clearly illustrates that government antitrust enforcement is not just a “numbers” game. The antitrust agencies are committed to digging deeply into the underlying facts concerning the merging firms, the history and future of the affected marketplace, and the transaction-related efficiencies. Absent credible evidence of likely anticompetitive effects, but with a strong story on efficiencies and customer benefits, a deal still stands a high chance of approval, regardless of “presumptions” based on historic market shares.