



The Computer & Communications Industry Association
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UNDERSTANDING IBM'S MAINFRAME MONOPOLY

WHY POLICY MAKERS SHOULD CARE

- Over 80% of the world's corporate and government data resides on mainframes.
- Over \$5 trillion worth of corporate application and data assets rely on IBM mainframes today.
- Almost 95% of Fortune 1000 companies use IBM's Information Management System (IMS) for their most critical data management needs.
- More than 50 billion transactions—including financial ATM sessions, healthcare record access, tax accounts and other critical information—are running through IMS databases on a daily basis.
- More commercial transactions are processed on the mainframe than any other platform, and yet, **this market is under the exclusive control of IBM.**

IBM - A HISTORY OF DOMINATION

- IBM pioneered vendor lock-in as a business strategy in the computing industry, first with punch cards in the 1950s, then with the mainframe.
- The installed base of approximately 10,000 mainframes used by IBM's biggest customers drives large volume hardware, software and consulting sales.
- With over 49,000 patents, IBM is the largest patent holder in the world.
 - Compare to Microsoft (8,000+) and Oracle (approximately 1,000).
 - IBM uses its patent portfolio as a means of forcing smaller companies that threaten its mainframe monopoly out of business; larger companies are compelled to pay lucrative settlements to avoid protracted litigation.
- Current problems with our out-of-date patent system as it applies to the software/IT industry amplify the power of IBM's patent portfolio.
 - IBM can foreclose competition in many IT markets just by refusing to license its patents on reasonable and nondiscriminatory terms.
- The first wave of mainframe competitors were systematically eliminated in the mid 20th century (Burroughs, UNIVAC, NCR, Control Data, Honeywell, GE, RCA). A second wave of mainframe competitors exited the market in the late 20th century (Amdahl, Fujitsu, Hitachi).

IBM'S ONGOING ANTICOMPETTIVE BEHAVIOR

- In direct contravention of its previous licensing practices while it was still under the government consent decree, IBM refuses to allow third parties to supply mainframe computers.
 - Specifically, *IBM refuses to license its mainframe system software for use on other companies' mainframe computers.*
 - IBM refuses to provide third parties with adequate information and licenses to ensure that their mainframe computers interoperate fully with IBM's architecture.
- IBM has repeatedly threatened and taken action against third party solution providers who offer competitive solutions or products that assist customers with migration away from the mainframe.
- **As a result, IBM owns over 99% of the installed base for IBM-compatible mainframes** (IDC Research).

IBM LEVERAGES ITS MONOPOLY

- Legacy data and applications that reside on mainframes are prohibitively expensive and technically challenging to move onto more modern computing platforms – causing customer lock-in.
- IBM has repeatedly resorted to tying their mainframe hardware to their mainframe operating system (OS) and preventing other solution providers from offering competitive compatible systems.
- IBM service agreements often stipulate that they will not support mainframe systems with non-IBM components attached.
- IBM has raised prices for mainframe solutions 10-15% annually over the last few years.
- Prices for mainframes, software and consulting services from IBM have remained higher than costs for other open platforms based on UNIX, Linux or Windows, which have fallen over the years. For example, the price for 1GB of mainframe memory is approximately \$6,000 while the price for 1GB of memory for Intel or AMD-based servers running Linux or Windows is less than \$100.

TIME FOR ACTION

- Without real choice and no cost effective way to move off of the mainframe, IBM's customers are denied the ability to choose the most appropriate computing technologies for their data processing requirements.
- Given the strategic nature of mainframe computing and mainframe data, action must be taken to give customers choices beyond IBM for hardware, software and consulting services.
 - Interfaces should be published and made freely available by IBM for developers looking to interact with IBM mainframe applications and data.
 - IBM should be bound by standard rules that govern monopolies and be required to license software and protocols to third parties under reasonable terms.
 - **IBM's anti-competitive actions should be reviewed by antitrust regulators.**

A TIMELINE OF RECENT EVENTS

- In 2001 the US Department of Justice dissolved a 49-year-old consent decree IBM had signed which kept tabs on its business practices as a result of prior anticompetitive actions. However, the Department made it clear that if IBM engaged in further “anticompetitive activity” they would be “immediately liable to suit.”
- IBM has since aggressively sought to protect its hold over the mainframe by buying or striking deals with small competitors who raise antitrust concerns.
 - In 2004, a small company called Compuware extracted a \$400 million settlement from IBM after alleging that IBM abused its mainframe monopoly to block competition in an adjacent market for mainframe tools.
 - In 2007, QSGI—a company who refurbished used IBM mainframe computers and sold them to customers for significantly less than the cost of a new IBM mainframe computer—announced during an earnings call that it experienced a sharp decline in refurbished IBM mainframe sales because IBM had terminated its pre-existing policy of providing QSGI with the necessary tools to refurbish and resell IBM mainframes. QSGI informed investors that because of IBM’s anti-competitive practices, QSGI had no choice but to exit the business of providing refurbished mainframe computers that competed with IBM. QSGI’s CEO also told investors that its attorneys advised QSGI that IBM’s conduct ran afoul of established antitrust laws.
 - Before QSGI could file an antitrust suit, IBM entered into a “partnership” with QSGI for providing mainframe services. Under the new partnership, IBM agreed to refer its existing mainframe customers to QSGI for auditing and data erasure services, while keeping QSGI out of the mainframe market.
- Platform Solutions, Inc. (PSI) developed a competitive mainframe platform that used lower cost, Intel-based servers. Although a small company, PSI’s technology threatened to break IBM’s lock on the mainframe.
 - In response to reports that Hewlett-Packard was in discussions to purchase PSI and inject real competition into the low-to-mid range mainframe market, IBM ceased licensing PSI the patents needed for interoperability and filed a patent infringement suit against PSI in December 2006 seeking to eliminate PSI before they became too much of a threat. PSI responded to IBM by strongly denying IBM’s claims, and PSI alleged antitrust violations, unfair competition and business torts claims of its own.
 - In November 2007, another small mainframe manufacturer, T3 Technologies, signed onto PSI’s lawsuit against IBM and added its own antitrust allegation.
- Despite IBM’s purchase of PSI and the subsequent withdrawal of its antitrust complaint, European officials announced that they would continue to investigate IBM’s actions in the mainframe marketplace.
- In early July 2008 after it was reported that T3 was preparing to file an antitrust complaint of their own in Europe, IBM acquired PSI who then agreed to terminate its legal proceeding against IBM.
- In January 2009 T3 Technologies filed a formal antitrust complaint against IBM in Europe.