



Computer & Communications Industry Association

Statement of

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Before the

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Committee on the Judiciary
U.S. House of Representatives**

“Competition in the Evolving Digital Marketplace”

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Mr. Chairman, I appreciate the opportunity to testify before the Subcommittee on the role of antitrust law and competition policy in the digital age. I am President and CEO of the Computer & Communications Industry Association (CCIA), an organization that has promoted openness, interoperability and competition in technology industries for over 35 years. My testimony today reflects the views of my organization and should not be attributed to any individual member company.

Over the years, CCIA has been instrumental in the major antitrust cases of the high-tech era, including the fight against IBM dominance of the early computer marketplace, the breakup of AT&T, the U.S. Department of Justice (DOJ) and European Commission disputes with Microsoft and, most recently, the multijurisdictional conflicts regarding various anticompetitive strategies devised by Intel and IBM.

On Prudent Antitrust Enforcement

Let me begin by acknowledging that care must be taken to guard against overly aggressive antitrust enforcement, but I caution against stretching this argument too far. Recent claims that high-tech markets are harmed by antitrust enforcement need to be put in context. Since the passage of the Sherman Act, there have been claims that antitrust law should not be applied to “new” industries because of “new” economic forces. In the first Sherman Act case decided by the Supreme Court in 1897, defendants claimed that the high fixed costs of the railroad industry would lead to ruinous competition that would destroy the industry. Defendants over the years have claimed that applying antitrust to corporate stock acquisitions would greatly harm the stock market and that applying antitrust to the steel industry would imperil our nation’s competitiveness. In each case, antitrust law and its enforcers have adapted. If anything, antitrust enforcement helped pave the way for Silicon Valley as we now know it. Antitrust scrutiny of IBM prompted

the unbundling of hardware and software, allowing an independent software industry to emerge. Even before that, antitrust enforcers required AT&T to license one of its key inventions, the transistor, which gave rise to the modern hardware industry.

I would also like to touch on the role of competitors in investigating antitrust violations. The role they play can be invaluable. They have indispensable knowledge and expertise about their own markets and a firsthand view of the harm inflicted upon consumers. In almost every antitrust case, competitors have played a large role in bringing anticompetitive conduct to light. However, the case and facts must be examined independently, with a special eye given towards competitors' motives. Competitors are not just harmed by anticompetitive behavior, but they are also harmed by legitimate, Darwinian competition. Although not a completely new phenomenon, the frequency with which antitrust is being wielded cynically by companies to hurt their fiercest competitors is increasing, and they do so because their competitors' innovative business models threaten their own entrenched business models, bloated margins and legacy revenue streams. These targeted legal and public relations campaigns are actually damaging to competition. Regulators must therefore recognize that the most knowledgeable companies may also have ulterior motives. In my experience, our regulators are quite capable, and it is unfair to suggest they cannot think critically and differentiate between trumped-up antitrust claims designed to protect legacy business models and legitimate claims about threats to the marketplace.

Characteristics of Anticompetitive Threats in the Digital Economy

Certain aspects of high-tech markets—such as network effects, tipping points, intellectual property thickets, lock-in, complexity, etc.—may complicate antitrust enforcement. Some innate features of “new economy” industries may appear to have natural monopoly characteristics. However, this cannot rationalize more lenient antitrust policy. Quite the opposite, antitrust laws

must remain in place to prevent firms from abusing the significant market power they are likely to obtain. Of course, it is Antitrust 101 that market power alone is not illegal. It is the *anticompetitive abuse* of market power that the law prohibits, for it impedes innovation and harms consumers. Through the numerous cases we have been involved in, CCIA has seen certain characteristics arise as red flags in determining whether behavior is benign or anticompetitive. These red flags pertain to consumer “lock-in,” the presence of chokepoints, and the entrenchment of incumbents.

Lock-in

Consumer lock-in occurs when significant switching costs exist that effectively prevent customers from migrating to other vendors. In high-tech markets, proprietary document formats, closed source code, and non-interoperability can all create or exacerbate lock-in. When artificial barriers are erected to prevent users from changing products or services, customers are harmed and the perpetrators are insulated from competitive pressures, which lowers incentives to innovate. Currently, CCIA has filed a case against IBM for abusing locked-in customers in an attempt to maintain its mainframe monopoly. Because legacy users of mainframes (who account for 80% of the world’s corporate and government data) face high costs associated with moving their data and applications to other systems, IBM has been able to keep prices much higher for these users than even IBM’s other customers in similar markets that utilize non-mainframe machines. When a few companies pioneered methods to decrease mainframe switching costs, thus allowing dissatisfied IBM customers to more easily migrate off IBM mainframes if they so chose, IBM began an aggressive campaign against these pioneers, including litigation, intimidation, and finally purchasing one of the companies and mothballing its new technology.

On the flip side of the lock-in equation, high market share does not always mean the presence of lock-in. In certain markets, especially Internet-centric markets, competition is just a

click away. Regulators must be cognizant of barriers to entry, which include circumstances and phenomena that prevent new players from entering a particular market. If the barriers to entry are minimal, then high market share is not necessarily correlated with market power. In the Internet Search space, Google went from scrappy startup to market leader. Given low barriers to entry, it could just as easily lose that position, as Excite, Lycos and Alta Vista did before.

Choke Points

Choke points in high-tech markets are also frequent problem areas. These are specific markets through which consumers *must pass* to access an ecosystem of related products and services. When choke points are abused, the controlling company can squeeze both consumers and product or service suppliers in the system to accept higher costs or unfavorable terms of use. Two current examples of choke points are the markets for semiconductors and Internet Access.

The recent Federal Trade Commission (FTC) investigation of Intel illustrates the presence of choke points in the markets for semiconductors. The semiconductor market for PCs and servers never saw competition blossom because of high intellectual property hurdles, the importance of standardization, high upfront capital costs and anticompetitive conduct by the dominant firm, Intel. While Intel earned some of the highest profit margins of any company in the world, the original equipment manufacturers (OEMs) that relied on Intel to supply them with the majority of their computer chips hardly remained afloat. In fact, it turned out that Dell, one of the most successful OEMs, remained profitable only because they were receiving kickbacks from Intel not to use other manufacturers' chips. Furthermore, since the semiconductor serves as the main brain of the computer or server it powers, other components, such as graphics processing units (GPUs), must essentially plug into the semiconductor so they can work in conjunction with it. As the recent FTC investigation shows, Intel used this choke point to secretly harm its competitors' products when it began to view GPUs as a threat to its own position in the CPU market. Intel's

activities illustrate that dominant companies who control choke points can threaten ancillary markets as well.

The Internet Access market is an example of another chokepoint. The content, applications and websites that run “on top” of the transport layer of the telecommunications network represent an extremely competitive market (or grouping of markets); perhaps the most competitive market in history. However, the infrastructure that users need to access the Internet is not nearly as competitive. Most consumers face a duopoly of Internet Access Providers (IAPs): their phone company and their cable company. The current network neutrality debate is a by-product of this phenomenon. As *The Economist* recently observed, the network neutrality debate is unique to the United States because we are nearly alone among the industrialized nations in tolerating a non-competitive market for Internet Access.

[America’s] vitriolic net-neutrality debate is a reflection of the lack of competition in broadband access. The best solution would be to require telecoms operators to open their high-speed networks to rivals on a wholesale basis, as is the case almost everywhere in the industrialised world. America’s big network operators have long argued that being forced to share their networks would undermine their incentives to invest in new infrastructure, and thus hamper the roll-out of broadband. But that has not happened in other countries that have mandated such “open access”, and enjoy faster and cheaper broadband than America. ... Rivalry between access providers offers the best protection against the erection of new barriers to the flow of information online.¹

Installed-base Opportunism

Another topic I would like to address is the recent controversy surrounding Apple and the applications (“apps”) market for smart phones. Several months ago, news accounts leaked of an FTC investigation into Apple’s policy change that prevented third party developers from using Adobe Flash-based tools to write iPhone apps. The functional importance of such a restriction

¹ “The Web’s New Walls: How the Threats to the Internet’s Openness Can be Averted,” *The Economist*, September 02, 2010, available online at <http://www.economist.com/node/16943579> (last accessed on September 14, 2010).

from a competition policy standpoint was that it harmed the ability of developers to write applications for multiple operating systems. Because Apple had the largest apps store and highest percentage of the market, developers would almost always write their applications for Apple's platform. However, the use of Flash-based tools would allow developers to easily write apps for both iPhones and other phone operating systems, such as Android. Adobe claimed Apple's actions were clearly anticompetitive and anti-consumer, while Apple claimed business and technological justifications for its actions. By no means was this a slam-dunk case for the FTC, but it does appear that the Commission's investigation helped spur Apple to reverse its decision.

Although I will refrain from making a judgment on the Apple/Adobe matter, there is one aspect of this case that has broader importance to future antitrust cases. In principle I support and promote open and interoperable systems. However, I also recognize that not all platforms are going to be open. Although this can sometimes be an antitrust concern, it truly depends on market concentration and specific circumstances. One aspect of the Apple situation that gives me pause is that Apple changed policies after it had surged to a commanding lead in the apps market, locking down a platform that had previously been open. Carl Shapiro, the current Chief Economist at the DOJ, discussed this phenomenon when he was still a professor at Berkeley. Although he recognized the challenges with upfront "duties to deal" he did endorse being able to limit a dominant firm's ability "to change policies by shutting down interfaces that had been open."² This behavior, also known as *installed-base opportunism*, is something that regulators must guard against. Competition policy should discourage baiting consumers with an open platform, and then closing down and restricting that platform to competition after consumers have already parted with their money. If Apple had banned Adobe Flash tools from the beginning, there likely would

² Michael L. Katz & Carl Shapiro, *Antitrust in Software Markets*, in *Competition, Innovation and the Microsoft Monopoly: Antitrust in the Digital Marketplace* at 39 (Jeffrey A. Eisenach & Thomas M. Lenard ed. 1998).

have been less impetus for an investigation by the FTC. When consumers and developers commit to a system, they should know what they are getting into beforehand. When a company uses newly-obtained, increased market share opportunistically and closes down a platform to avoid competition, customers who have already locked themselves into this system (in the case of an iPhone, by signing an expensive two year service contract) – are deprived of the opportunity to make an informed decision up front.

FTC's Consent Decree with Intel

Given the timing of this hearing, I would be remiss if I did not take this opportunity to commend the FTC for its recent settlement with Intel over a number of anticompetitive actions. Although we commented more extensively on the specifics of the Intel Consent Order before the FTC,³ I wanted to outline some of my thoughts before the Subcommittee. The FTC showed its competence and expertise by expanding its charges beyond the scope of the numerous other jurisdictions that had already brought charges against Intel. The FTC discovered behavior by Intel that included (a) altering its compilers to make competitors' products appear slower, (b) releasing false product roadmaps to intentionally deceive companies that relied on Intel's specifications, and (c) altering product designs to harm interconnected components that Intel found threatening. The FTC also made the correct decision when it came to remedying the effect of Intel's behavior by seeking to bolster the current crop of competitors and reinforce their right to compete in the x86 computer market, as new entry is unlikely in this particular market.⁴ However, CCIA is concerned with some of the ambiguity embedded in certain sections of the Consent Order and has urged the FTC to aggressively enforce the decree and interpret ambiguity in favor of consumers.

³ Comments of the Computer & Communications Industry Association (CCIA), *In re Intel Consent Order*, Docket No. 9341 (filed Sept. 7, 2010).

⁴ See page 4 above.

Re-examining Exceptions to the Rule in Favor of Free and Open Competition

Finally, we must remain both skeptical and circumspect about existing or proposed exceptions to the general rule in favor of free and open competition. I urge you to view with a critical eye all of the following:

- Any industry-specific exemptions, whether for sports leagues,⁵ or regulated industries, such as those manufactured by *Trinko* and *Credit Suisse*;⁶
- proposed exemptions based upon some abstract “new” market phenomenon, whether that involves railroads or Internet news coverage; and
- government-granted rights to exclude in the form of current intellectual property entitlements, or proposed new monopolies on facts, news, fashion design, and so on.

Each of these exceptions – existing or proposed – must be consistently tested in the crucible of cost-benefit analysis. Some exceptions will pass that test, such as many intellectual property rights – but it betrays the consuming public if we fail to periodically question and reassess whether or not to absolve certain industries for conspiring against a free and open market.

Conclusion

For the past 25 years I have had a front row seat (and sometimes a courtroom seat) for the antitrust battles of the tech industry. The successful outcome of some battles can be linked to spurts of innovation and economic activity that has propelled the US economy forward. As our country looks for no cost ways the government can help boost the economy, ensuring our antitrust policies are doing their job is a sound, laudable step. It is critical for authorities to be watchdogs because, when companies face bullying behavior by a dominant company that has real power to

⁵ *Flood v. Kuhn*, 407 U.S. 258 (1972).

⁶ *Verizon v. Law Offices of Curtis V. Trinko*, 540 U.S. 398 (2004); *Credit Suisse Securities (USA) LLC v. Billing*, 551 U.S. 264 (2007).

lock them out of the market, the risks of retaliation often mean silence – without a subpoena. But it is also important to remember that big doesn't equate to bad and one must scrutinize a company's behavior and the economic forces at play. We want a market where the best, most innovative ideas and disruptive technologies can make it out of the garage, dorm room or board room and into the marketplace without being squashed by big players trying to maintain their market share at the expense of the consumer and nation's bottom line.

About CCIA

The Computer & Communications Industry Association (CCIA) is dedicated to open markets, open systems, and open networks. CCIA members participate in the information and communications technology industries, ranging from small entrepreneurial firms to the largest in the business. CCIA members employ nearly one million people and generate annual revenues exceeding \$200 billion.

From the beginning, CCIA has believed that understanding and protecting innovation was central to our industry's future, and that our industry was unique, and of special importance to society. The essence of our industry is its ability to intelligently capture and analyze information, and communicate it to different people and parts of society more quickly and comprehensively than ever imagined. In simple terms, electronic computing and communications greatly enhance our ability to think, speak, and interact. The innovation in these industries is of immense social, economic, and political importance, and it is changing almost every aspect of our world.

Innovation – how to foster it, protect it, and benefit from it – requires us to understand the dynamic process that has worked to get us to where we are. It is not an accident that innovation has flourished in a society that values an open, competitive marketplace, where independence and free speech are enshrined in law. Therefore, CCIA's commitment to vigorous competition, freedom of expression, and openness is a natural product of understanding what has helped our industry thrive, and what it needs to continue to do so.