CHAIRMAN REED E. HUNDT^{*}

Presidents sign important bills into laws with multiple pens, so as to hand out a dozen or so to key participants in the process. When Bill Clinton signed the 1996 Telecommunications Act¹ into law, Commerce Secretary Ron Brown grabbed two off the table—one for himself and one he gave to me, because I was the chairman of the Federal Communications Commission. He gave me his trademark wink, as if to say, good luck! My pen is framed on my wall. I don't know what happened to Ron's. Two months later he died in a plane crash in Croatia.

Anyone who lives long enough confronts tragedy. If we can learn from it, the lesson is to be infinitely grateful when visited by luck and success. For those of us at the Commission and elsewhere in government who implemented, enforced, and reformed the nation's regulatory paradigm over the last two decades, the enactment of the 1996 Act was a great piece of luck. It permitted all of us to help create the fascinating, overwhelmingly successful, and never-ending communications revolution.

Plainly some of the results of the digital age have been sinister, deadly beyond imagination. No technology resists use by forces of evil. Yet the overall legal framework of the 1996 Act has enabled principles of entrepreneurial competition and individual liberty to spread around the world.

All knew from the day of signing that the Act had everything to do with change, and something to do with the Internet. Vice President Gore's policy adviser, Greg Simon, arranged for President Clinton's bill signing to take place on the Internet, a first in such ceremonies. Simon, who in late 1993 was the first person to show me the Internet in action, also had the superb idea of setting the signing ceremony in the spectacular central room of the Library of Congress. The law, among other things, was meant to fulfill the promise Vice President Gore had made years before: "The schoolgirl in Carthage, Tennessee, should be able to have access to all the information in the world's biggest library without leaving her hometown." And indeed, then-Congressman Ed Markey and Senator Jay Rockefeller had assured (thanks to Senator Olympia Snowe's crucial vote) that the bill authorized the FCC to allocate enough money to connect every classroom and library to the Internet—this was the E-Rate, recently reformed and expanded by the Wheeler Commission.

The Republicans had won the House and Senate in the previous election by running against the Administration's tax increase in the Omnibus Budget Reconciliation Act of 1993 and the failed universal health care bill. Nevertheless, the Republican leadership, Senator Dole and Speaker Gingrich, supported the telecommunications reform, as did the White House

^{*} In 1996, Reed E. Hundt was Chiarman of the FCC.

^{1.} Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified as amended in scattered sections of 47 U.S.C.).

and Congressional Democrats. The principal reason for the huge bipartisan support (only Senator John McCain was a prominent outlier) was that the great lobbying enemies, AT&T and their severed satrapies, the regional Bell companies, had agreed to attack each others' markets, and thus wanted a bill that let them both have at it. Neither the Bells nor AT&T then understood that the Internet was the ring to grasp.

The guiding principle of the new law was that FCC rules would open every communications market to competition. By contrast, the 1934 Communications Act gave the Commission the task of regulating monopolies, especially the national telephone monopoly of AT&T. In succeeding decades, Congress expanded the Commission's jurisdiction to cover such new markets as broadcast television, cable, satellite and cellular. In each case the Commission's regulations tended to minimize business risk for incumbents, in exchange for providing public interest benefits. At least until the 1980s, Congress and the agency typically encouraged oligopolistic market structures, hived off markets from one another, slowed the pace of technological change, and created barriers to market entry.

By contrast, the 1996 Telecommunications Act asked the Commission to adopt the opposite approach. Rules should be erased or rewritten to create competitive markets. Barriers to adjacent market entry and new market creation should be reduced. The agency should encourage firms to take risks in return for reward. In short, everyone should compete with everyone and try everything that innovation permitted. The Act was only a tenth as long as, say, the Affordable Care Act, because it did not contain a plan for a particular outcome for any market. Competition, not Congress or the Commission, would produce optimal results.

Because existing markets were monopolized or oligopolized, the Commission had to write rules that in effect created irresistible opportunities for new entrants. Overall, the agency had to conduct more than four dozen separate proceedings. The affected parties had billions of dollars at stake, and they hotly contested every erasure of old rules and every phrase of new rules. This sea change in regulation and business models was accomplished, under the Congressional deadlines, in eighteen months, not counting the time for judicial review that followed.

Not only those in the agency, but also the business participants in this process would probably say, twenty years later, that they never worked so hard to produce such momentous results.

As everyone drilled down on the details of reform, the Internet's rapid growth and astounding potential for transformation transfixed imagination and stimulated a huge stock market run-up. In that ramshackle eyesore of a building at 1919 M Street, we were at the center of global change.

Fortunately, as we worked, the President sailed smoothly to reelection, so that our team stayed in office until we completed our processes. Our brilliant lawyers then won the key cases on judicial review, including a five to three victory on the meaning of federalism in the Supreme Court after I had turned over the agency's helm to the new chairman, Bill Kennard. Because of technological innovation and the new paradigm of the Act, seismic waves of change hit the communications, computer and content industries. How could any of the leaders of the incumbent companies know what new strategies to select?

The old AT&T telephone monopoly had been broken up by the Department of Justice in 1982. It was divided into seven regional local telephone monopolies, known as the Baby Bells, and a separate long distance industry, dominated by AT&T, with MCI and Sprint as challengers. This structure was locked into place by a court order known as the Modified Final Judgment. The new law repealed the MFJ, and permitted the Baby Bells to enter long distance when the FCC granted permission.

The two most visionary local companies, Southwestern Bell and Bell Atlantic, used the new law to pursue an acquisition strategy. They bought the other telephone companies, in order to achieve economies of scale as they attacked AT&T in long distance. But soon they realized that their right goal was to become what they are now, under the names AT&T and Verizon, namely, the leading national wireless carriers. The firms' shift from regional wire line to national wireless is the most dramatic business model change at a really large scale in modern history.

AT&T also welcomed the 1996 Act. It argued especially hard for the Commission's rules that gave it the right to lease the local access network. The company wanted to offer its customers, more than half of the population, local and long distance service. But after barely a year of effort in this strategic direction, AT&T tried to merge with Southwestern Bell. Don't beat them, join them—that was what AT&T's CEO Bob Allen seemed to be saying in 1997 when he declared that this merger, at odds with the premises of the Act, was in fact "thinkable." In one of the last decisions during my chairmanship, my team coached me up (with the support of key Senators) to explain publicly under the new law's competition paradigm the suggested merger was "unthinkable." That word, I learned years later, killed the merger that was actually being negotiated in a conference room at the time of my speech.

In the wake of this fiasco, Mike Armstrong replaced Bob Allen as AT&T's CEO. He also had no stomach for leasing the Bell network to acquire local voice customers. Instead, he used the cash flow from the company's huge but shrinking long distance revenue to acquire cable companies. By 2000 AT&T had become the biggest cable company in the United States, under the name AT&T Broadband.

As AT&T splurged on acquisitions the tech-driven stock market soared to bubble heights. The cheap capital of IPOs and easy credit enabled firms to build the new communications infrastructure at a rapid rate. From the mid-90s to the early '00s, firms invested more than a trillion dollars in building the new, digitized networks that undergird communications to this day.

But AT&T's timing was dismal. It paid sky-high prices for the cable assets, and had to borrow a lot for the deals. Almost from the moment it had finished construction of its cable empire, the stock market began a long, steep

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decline, and the nation entered the mild recession of 2000-2001, AT&T could not hold on to its purchases. In 2001 it sold its cable companies at huge losses to astute, patient Comcast, and Brian Roberts became the new king of cable.

Even worse, AT&T spun off its wireless business: expanding that should have been its strategic goal. But how could anyone in the old fixed line telephone business have that insight? The 1996 Act exiled big companies from edenic incumbency and sent them wandering into unknowable futures. Some thrived. Others, like AT&T, withered.

In 2005, SBC bought that once great company after all. The buyer wanted this icon of twentieth century America for its long haul assets and its brand name. SBC paid \$16 billion. AT&T's market capitalization was \$250 billion in 1997, when I had blocked the same merger. The 1996 Act envisioned competition, and therefore necessarily imagined that some firms would be destroyed in the market.

A few weeks before the momentous day when Ron Brown snatched that pen for me, Bill Gates, then Microsoft's CEO, went to the Oval Office to make a last-ditch effort at persuading the President to veto the bill. Perhaps he was concerned about the speed of change that would follow. He already knew the Internet was threatening his operating system monopoly. Clinton listened attentively. Gates felt he had made some headway, as he flew to New York. Looking at the television screen in LaGuardia after landing, he saw that the President had agreed to sign the bill.

A year and a half later, in 1997 the FCC extended the enhanced service provider exception to Internet access by explicit order. As Steve Case, then CEO of AOL, understood, this decision guaranteed that firms like his could offer dial-up access to the Internet by using the local Bell company's monopoly telephone network for free. He enjoyed guaranteed distribution to almost every building in the country. Case leveraged this regulatory advantage into the creation of a national franchise in e-mail.

Gates had imitated, and then crushed Netscape's browser, the initial method of accessing the Internet. However, under threat of both the Department of Justice lawsuit against extending his Windows monopoly and the pace of change, he was not able to lead in the next big thing, e-mail. Then came search, where Google won dominance. Later, access became a mobile experience, and Apple made apps the cool new way into the Internet. Gates had more reasons to ask for a veto than he knew.

The government wanted the 1996 Act to produce this sort of Schumpeterian competition—cycles of creative destruction producing increasing social and economic benefits. Everyone knew that somehow the story was about the Internet. But no one knew which firms would win, or how long winners would hold their leads. Rapid change was the only certainty.

That access decision, and many other decisions implementing the procompetition paradigm of the 1996 Act, helped assure that the culture of the Internet would be open and ever-changing, chaotic and creative, risk-taking and reward-producing. Over the last two decades, through all the twists and turns of technology and politics, the Commission has continuously supported and extended the best attributes of that culture. To this day, the results of that steady purpose should give us confidence that the public and private sectors can work in rambunctious concert to better the human condition.