New Digital Realities; New Oversight Solutions in the U.S.

The Case for a Digital Platform Agency and a New Approach to Regulatory Oversight

AUGUST 2020

Authors

Tom Wheeler
Phil Verveer
Gene Kimmelman

HARVARD Kennedy School
SHORENSTEIN CENTER
on Media, Politics and Public Policy

"The internet is "the world's largest ungoverned space."

– *Google CEO Eric Schmidt 2013*[1]

Despite earnest efforts, the tech community has not demonstrated convincingly that it can regulate itself."

– *Former Google CEO Eric Schmidt, 2020*[2]

Abstract

- The digital marketplace is wide-reaching, complicated and self-reinforcing. The systems developed to oversee an earlier time are burdened by industrial era statutes and decades of precedent that render them insufficient for the digital present.
- In the absence of federal oversight, the dominant digital companies have made their own rules and imposed them on consumers and the market. Just as industrial capitalism operated—and thrived—under public interest obligations, so should internet capitalism be grounded in public interest expectations.
- Those expectations—and the new rules to implement them—should be the reinstatement of responsibilities long established in common law: the duty of care and the duty to deal.
- To accomplish this a new Digital Platform Agency should be created with a new, agile approach to oversight built on risk management rather than micromanagement. This would include a cooperatively developed and enforceable code of conduct for specific digital activities. As both a failsafe and an incentive, the agency would also retain its own independent right of action.

1 Judy Woodruff interview Eric Schmidt and Jared Cohen, *How Connecting 7 Billion to the Web Will Transform the World,* PBS NEWSHOUR (May 2, 2013), https://www.pbs.org/newshour/science/in-new-digital-age-google-leaders-see-more-possibilities-to-connect-the-worlds-7-billion.

2 Eric Schmidt, *I Used to Run Google. Silicon Valley Could Lose to China.,* N.Y. TIMES (Feb. 27, 2020), Op-ed., https://www.nytimes.com/2020/02/27/opinion/eric-schmidt-ai-china.html.

Table of Contents

Table of Contents, continued

Executive Summary

Today's exploding digital marketplace has delivered great gains to consumers. Residing amidst the wondrous capabilities of digital technology, however, are decidedly anti-consumer results.

The digital market is characterized by a tendency to tip toward market dominance and an absence of competition that results in consumers, innovators, and the users of digital information being harmed. The lack of competition (a product at least in part of network effects and economies of scale), when connected to the enormous power of data control in the hands of a limited few tech platforms, is further harming innovation, creating barriers to the possibility of healthy competition, and enabling the exploitation of personal privacy. These forces have created an unsupervised culture where the consumer is the product and the companies make the rules.

For the last two decades digital companies have successfully sold the notion that government oversight of their activity would stymie innovation.

These results occur in an environment in which there are inadequate public policy tools available to protect consumers and promote competition. Numerous reports and studies, referenced herein, have chronicled the adverse effects imposed on consumers and competition by the dominant digital platforms. The purpose of this paper is not to replicate those efforts, but to take them to their logical conclusion by addressing remedies.

We exist in a seemingly contradictory, but not historically unprecedented, period when new companies have harnessed new technologies to innovate and deliver remarkable new products. Too often, however, these advances come at the cost of harming consumers and denying others the opportunity to innovate. For the last two decades digital companies have successfully sold the notion that government oversight of their activity would stymie innovation. The success of this lobbying has allowed the companies to maximize benefits to investors through the denigration of personal privacy, consumer rights, and the supposedly all-American concept of competition and competitive markets. The failure to protect the public interest in such matters has added to the destruction of the public's trust in government as Americans observe the inability of their representatives to do anything about obvious harms. Fifty-nine percent of Americans believe elected officials are paying "too little" attention to issues dealing with technology and technology companies, according to a Gallup survey.[3]

3 TECHLASH? AMERICA'S GROWING CONCERN WITH MAJOR TECHNOLOGY COMPANIES, JOHN S. AND JAMES L. KNIGHT FOUNDATION AND GALLUP, INC. (2020), https://knightfoundation.org/reports/techlash-americas-growing-concern-with-major-technology-companies/.

Make no mistake, the innovations and economic growth of the digital platform companies are very much in the public interest. This paper proposes a structure in which the public interest of strong and innovative companies and the public interest of consumer rights and competitive markets can both be preserved. To do so, however, requires the vision to first assert oversight and then to develop a new model for that oversight.

The existing agencies of government are based on statutes and structures that reflect the relatively stable markets and relatively stable technology of the late industrial era. As such, they are insufficient to deal with dynamic digital markets driven by rapidly changing technology.

The existing agencies of government are based on statutes and structures that reflect the relatively stable markets and relatively stable technology of the late industrial era. As such, they are insufficient to deal with dynamic digital markets driven by rapidly changing technology.

In the absence of federal oversight, the dominant digital platforms have become governments unto themselves with the ability to impose their own set of rules on economic activities and consumer choices. The Silicon Valley mantra "move fast and break things" failed to take into consideration the consequences of such actions. As such, it has had the practical effect of "move fast and make our own rules before others catch on."

The lack of legally mandated duties to protect consumers and competition in the new digital environment, and the practical limitations of antitrust jurisprudence, leaves society and the economy at enormous risk. In a time of national duress, the growth of a solid middle-class economy is threatened by the dominance of a handful of digital giants. Yet, the statutes and regulatory models adopted in the industrial era are insufficient to deal with the realities of the internet era.

The authors have each spent their professional lives at the intersection of new technology and public policy. From both inside government and inside industry, we have each wrestled with the application or absence of statutes to protect competition and consumers. It is from that experience that we have observed how the activities of digital technology companies have separated from the basic common law-derived principles that have historically governed marketplace behavior.

It is therefore necessary to create a federal agency agile enough to handle the oversight of data abuses and gaps in competition policy, while being capable of establishing corporate duties that promote fair market practices. The operations of this agency—a Digital Platform Agency (DPA)—should be governed by a new congressionally established digital policy built around three concepts:

1. Oversight of digital platform market activity on the basis of risk management rather than micromanagement; this means targeted remedies focused on market outcomes and thereby avoids rigid utility-style regulation,
2. Restoration of common law principles of a duty of care and a duty to deal as the underpinning of DPA authority, and
3. Delivery of these results via an agency that works with the platform companies to develop enforceable behavioral codes while retaining the authority to act independently should that become necessary. The iPhone is 10 years old, Twitter is 12 and Facebook is 14. History has shown that the medium is the message and that cataclysmic changes in how we communicate bring dramatic shifts in our society. Now, a decade later, society has begun to ask, "how different is this moment in time from others?"

Introduction

The federal government has become proficient at doing again what it did yesterday. These policies and procedures, however, have been ambushed by the future.

The 21st century has seen digital technology restructure economic activity and marketplace behavior. Fifty-two percent of the Fortune 500 at the turn of the 21st century no longer exist.[4] In 2000, GE, Cisco, ExxonMobil, and Pfizer, were four of the five most valuable companies in the world; by 2019 they had been replaced by Apple, Amazon, and Alphabet (Google) with Facebook charging hard at number six.[5]

We are not simply living through a variation on the industrial revolution (the "Fourth Industrial Revolution" as characterized by the World Economic Forum). We are living a wholesale change in economic activity driven by new forces. Continuing to rely on a handful of dominant digital companies to not only make the rules but also drive the economy can no longer work. The government, as the representative of the public interest, cannot be a spectator to this new economy. The nation needs the innovation of smaller companies for the creation of jobs, the delivery of ideas beyond those that meet the desires of the dominant corporations, and the ability to successfully compete with other digital innovators such as China.

As the new industrial capitalism replaced agricultural mercantilism in the 19th century, new rules became necessary to reflect the new operations of the market. In a similar manner, today's internet capitalism requires new rules to reflect the new market it has created. These new rules can simply be the reinstatement of responsibilities long established in common law.

The engine of the industrial revolution was the scope and scale application of men and material enabled by new technologies such as the railroad and telegraph. The industrial revolution was built around the supply of hard assets, whether it was industrial raw material or the output of its fabrication. These assets were typically exhausted by one-time use, and rivalrous in that their possession and use by one entity denied the usage to others.

The information revolution is built around a soft asset: data. While this asset continues to enjoy scope and scale economies, it is different from industrial assets in that it is inexhaustible (i.e., it can be used repeatedly), iterative (i.e., its use creates new data), and non-rivalrous (i.e., it can be consumed by more than one party).

4 *Digital Transformation Is Racing Ahead and No Industry Is Immune,* HARV. BUS. REV. (Jul. 19, 2017), https://hbr.org/sponsored/2017/07/digital-transformation-is-racing-ahead-and-no-industry-is-immune-2.

5 *List of public corporations by market capitalization,* Wikipedia (n.d.), https://en.wikipedia.org/wiki/List_of_public_corporations_by_market_capitalization#2000.

Combining these characteristics with the low marginal cost of acquiring and exploiting the raw material and of the distribution network it utilizes means there is even greater mass production in the information economy than there was in the industrial economy. As a result, digital companies' activities are not typically constrained by production, but by demand.

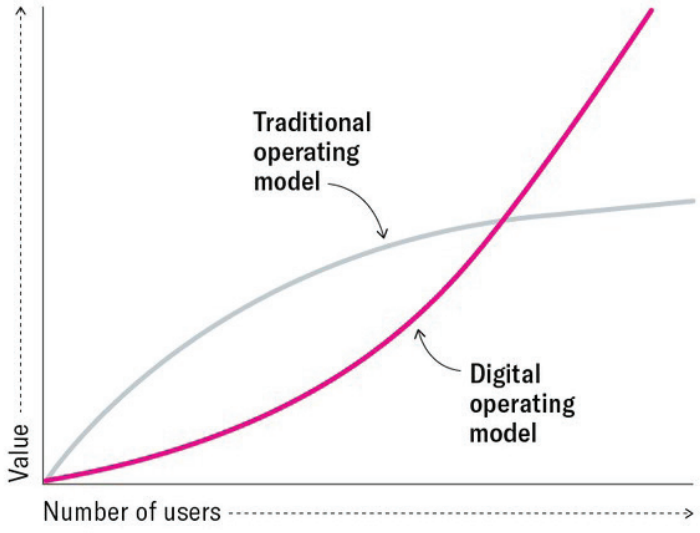
Harvard business professors Marco Iansiti and Karim Lakhani have illustrated the difference between the industrial operating model and the artificial intelligence-aided digital operating model.[6]

Continuing to rely on a handful of dominant digital companies to not only make the rules but also drive the economy can no longer work.

In the industrial model companies eventually confronted diminishing marginal returns. The supply of hard assets could only scale up to a point before costs began to increase and markets became saturated. The digital model, however, appears to know no such limits. By collecting and hoarding data that is both interchangeable and interoperable, digital operating models can continue to grow.

Outstrip Traditional Firms

The value that scale delivers eventually tapers off in traditional operating models, but in digital operating models, it can climb higher.



From "Competing in the Age of AI," by Marco Iansiti and Karim R. Lakhani, January–February 2020, Harvard Business Review

Add to this rudimentary artificial intelligence and you have a digital perpetual motion machine. Tech analyst Azeem Azhar has dubbed this the "AI Lock-in Loop" where data begets AI, which begets better products, which begets more

6 Marco Iansiti and Karim R. Lakhani, Competing in the Age of AI, HARV. BUS. REV. (Jan–Feb. 2020), https://hbr.org/2020/01/competing-in-the-age-of-ai.

data, which begets better AI, in a never-ending process in which the data asset is unleashed to produce, expand, and control.[7]

Digital technology has also sped up the pace of change, removing the time buffer that previously allowed society and its representatives in government to adapt to new technology. It took, for instance, 125 years for Alexander Bell's telephone to connect one billion people across the world.[8] It took less than six years for mobile phones using Android to reach the same milestone.[9]

Digital companies' activities are not typically constrained by production, but by *demand.*

The existing regulatory approach reflects the pace of the industrial era, typically awaiting market failures reaching a certain scale and effect before stepping in. The current speed of technology and marketplace development sabotages such an approach. The absence of ex ante behavioral rules allows dominant companies to quickly impose their will and dictate market behavior on their terms. Similarly, ex post quasi-judicial assessments of marketplace behavior allow companies to exploit digital technology's fast pace and behave as they wish until the government catches up, risking only a monetary or behavioral slap on the wrist as a consequence.

In the face of rapid-paced technological change that has reprioritized both individual and corporate activities, the United States government has been mired in policies and structures created for the industrial era of the 19th and 20th centuries. In the absence of such public participation, it is the leaders of the digital companies who end up defining market practices. Such corporate-developed rules, of course, advantage the rule maker over consumers and competition.

American policymakers' reluctance to impose regulatory oversight has, in large part, been the result of the digital companies' successful campaign to portray government regulation as stifling their "permissionless innovation" and the wondrous products that have resulted. Yet no one has proposed policies that require the granting of permission to innovate. The companies also point to competition with China to claim regulation would put the nation at a competitive disadvantage against the unregulated Chinese. Yet, what America needs to confront China is the kind of domestic innovation that is driven by competition and pro-competitive policies.[10]

At the federal level there has been no meaningful legislation addressing new technology since the Telecommunications Act of 1996, which principally dealt with networks, not platforms. Regulators are stuck with statutes that not only are from a pre-platform era but also are based on industrial era assumptions rather than policies that reflect internet era realities. At the same time, the digital companies have successfully promoted the message "we are different," accompanied by the assertion that establishing behavioral expectations would somehow break the magic of the digital businesses.

7 Azeem Azhar, The real reason tech companies want regulation, EXPONENTIAL VIEW (Jan. 26, 2020), https://www.exponentialview.co/p/-the-real-reason-tech-companies-want.

8 Dr Hamadoun I. Touré, Pathway to a Connected World, (speech, Geneva, Switzerland, Oct. 25, 2011), ITU TELECOM WORLD 2011, https://www.itu.int/en/osg/speeches/Pages/2011-10-25-4.aspx.

9 Jeff Desjardins, *Timeline: The March to a Billion Users* [Chart], VISUAL CAPITALIST (Feb. 26, 2016), https://www.visualcapitalist.com/timeline-the-march-to-a-billion-users/.

10 *See* Tom Wheeler, *Digital competition with China starts with competition at home,* BROOKINGS INSTITUTION (Apr. 2020), https://www.brookings.edu/research/digital-competition-with-china-starts-with-competition-at-home/.

It is time to assert that there must be governmental oversight of the digital platforms. It is no longer acceptable for the companies to make their own rules. The imposition of public oversight of digital platforms, however, cannot simply be a replay of what worked in the industrial era.

When the digital companies claim regulation harms innovation, they are hiding behind the implementation of industrial era statutes by agencies designed for earlier times. This paper specifically advises against the industrial era approach behind which the digital companies have sheltered. In its place should be a return to basic principles overseen by a new regulatory process.

The regulatory oversight proposed herein eschews the old-style regulation in favor of the simple restoration of long-understood common law standards to the new economy.

The regulatory oversight proposed herein eschews the old-style regulation in favor of the simple restoration of long-understood common law standards to the new economy.

In order to move forward protecting consumers and promoting competition while not harming innovation, it is necessary to look backward to common law principles first applied centuries ago. The implementation of the common law concepts of duty of care and duty to deal enables protections that address the "what" of marketplace effects rather than the "how" of traditional regulatory micromanagement. In so doing, they are responsive to the companies' complaints about "utility style micromanagement" while at the same time establishing proven consumer protection and competition promoting policies to be obeyed by the companies.

The DPA is thus responsive to the need for public interest oversight of digital platforms, while also being responsive to the companies' argument that application of existing regulatory policies would result in innovation-destroying micromanagement. Implementing this, the DPA should be empowered to act on its own but with a preference for such action through the cooperative development with industry stakeholders of enforceable behavioral codes subject to agency approval. Such a process would have the added benefit of imposing enforceable policies that, because of the cooperative process, are more agile and dynamic than traditional regulation.

The adoption of such risk management policies would also fill the vacuum created by the inaction of the federal government that has encouraged the nations of the European Union and the United Kingdom—as well as state governments within the United States—to intervene on their own. The international policy leadership role once held by the United States has been abrogated by America's failure to lead.

In the absence of national oversight and leadership of the borderless digital marketplace, American companies are forced to conform to rules made by other governments. Internationally, it is probably too much to expect that rules established for the protection of foreign marketplaces would not also happen to advantage foreign firms. Domestically, the homefield efficiency advantage of a uniform market of 325 million consumers is Balkanized by different rules in different states. The policies of the DPA would allow the United States government to reassume the mantle it has traditionally asserted regarding the oversight of new technologies.

Conclusion: The time has come for leadership, both domestically and internationally. It has always been true that markets work best when capitalism operates within guardrails established to protect consumers and competition – and in the process protect capitalism itself.

It is also time to recognize that policy inaction in the digital era has trammeled the

basic concepts embedded in common law—a duty of care and a duty to deal—that have served society and economic activity well for centuries and warrant revival.

As the industrial era of the 19th and 20th centuries evolved, the American government did as well, adding new authorities and agencies to oversee industrial expansion. Since the Second World War, however, government has been content to continue such regulatory structures and concepts, even as they became outdated. As 21st century economic activity evolves to leave behind the practices of the industrial era, so must the American government also evolve to reflect the realities of the digital era.

This begins with the establishment of a new Digital Platform Agency with the responsibility to protect consumers and competition in the digital marketplace. Effectively accomplishing this in the new fast-paced digital environment means revising the cumbersome, top-down rule-making process that has been in place since the industrial era. In its place should be a new, agile structure built on risk management, market outcomes and common law principles that blends DPA-initiated actions with the creation of enforceable, cooperatively developed behavioral codes.

Prioritizing American Dynamism

Ultimately, one must ask why in a time of national upheaval it makes sense to invest political capital in the regulation of digital platforms. The answer is that digital technology has become critical to address many of the challenges our nation faces.

A solid and expanding middle-class economy requires opportunity to be spread out rather than concentrated in the hands of a few. The innovation required to create such an expanding economy requires competition. For the dominant digital companies, however, such competition is an anathema. Only the government can open up the marketplace to embrace competition.

Digital technology has become critical to address many of the challenges our nation faces.

The dominant digital platforms have and will continue to oppose the imposition of competition in the digital market. Such opposition must be seen for what it is: opposition to the creative dynamism that produces economic growth and good jobs. Today, those benefits principally flow to those that dominate the digital market, their investors, and their executives. The dominant companies that grew out of dorm rooms and garages today choke off the ability of new innovators to do the same thing.

Thus far in the digital era, the dominant companies have been able to build their position free of government oversight. In the process they have ignored the basic common law-derived principles that have worked for centuries and that allowed industrial capitalism to flourish. What is proposed herein is conceptually nothing new: the application of common law-derived duties to the digital market. What is new is the fresh approach to oversight of such responsibilities.

In their opposition to such responsibilities, the dominant companies argue that only they have the intellectual heft and economic resources to drive American innovation forward. Such assertions overlook not only their history as former start-ups but also their ongoing fiduciary responsibility to investors to focus their innovative activities for corporate benefit.

Opposition to government oversight is also often cloaked in the economic competition with China. "China doesn't regulate their companies" becomes a rationale to justify market dominance over innovative dynamism. If the United States is to out-innovate China, it will be necessary for a thousand competitive flowers to bloom rather than relying on the output of a handful of walled-garden companies.

The recommendations of this paper, therefore, are timely and relevant, even in a period of national upheaval. At their core, these proposals are not new; they are the continued embrace of the all-American concept of competition through the time-tested application of basic common law-derived duties.

Antitrust: At Best a Partial Solution

Our first national competition law, the Sherman Act, was written in 1890 in the era of "trusts," financial constructions that gave control over multiple state-chartered companies to a common entity. Twenty-four years later it was updated with the Clayton Act to establish a national policy to protect against a broader definition of restricted competition.

The antitrust laws were created to protect competition in an industrial environment. The application of these statutes to the digital environment has been impeded not only by the challenge of applying industrial concepts to a digital reality but also by the evolution in jurisprudence over the last forty years.

The antitrust laws were created to protect competition in an industrial environment.

Today's implementation of competition policy began in the 1970s with the broad adoption by courts and prosecutors of the so-called Chicago School's assertion that most competition-related government interventions in the economy were counterproductive.[11] The only true measure of a company's market power, according to the strong version of the theory, is the effect on consumers as measured principally by prices. In the intervening decades this version of the "consumer welfare test" has become a conservative litmus test for judicial appointments and a guiding light of antitrust policy. It appears to have a majority of the United States Supreme Court as adherents.

The 2018 decision in Ohio v. American Express Co. is both the first time the Supreme Court has addressed an antitrust claim involving a two-sided platform and an instance of the Court majority's non-interventionist priors. The decision has, at least, increased the complexity of antitrust enforcement involving digital platforms. But without regard to its intrinsic merits, it illustrates one thing beyond any serious dispute: A process that began with a government complaint in October 2010 and not ultimately resolved until June 2018 is insufficient to deal with today's digital platforms. Something more will be required.

Such a "something" begins with the recognition of certain digital platforms (or certain components of them) as essential facilities. As common experience and multiple studies have illustrated, however, these essential services do not confront effective competition and are unlikely to do so in the future. The consequences are significant.[12] The introduction of competition in the case of targeted advertising, for instance, would have as predictable consequences that advertisers would pay less, publishers would receive more, and consumers would see an improvement in the quality and quantity of services available online.

11 *See* Robert H. Bork, THE ANTITRUST PARADOX, Basic Books, (1st ed. 1978)

While an important tool in the toolbox, it must be realized that antitrust remedies are blunt instruments. They are, for instance, an ex post response to a problem rather than an ex ante policy that would discourage such difficulties in the first place. Furthermore, antitrust enforcement is inherently uncertain and reliably lengthy, a period in which the targets continue their anticompetitive behavior. By the time of even successful conclusions, rapid tech changes often have redefined the relevance of the initial complaint (See US v. Microsoft).

Antitrust remedies are blunt instruments.

There is also a substantial question of whether courts rather than specialized regulatory agencies are best equipped to deal with the issues raised by the digital platforms. Professor Weiser cites Judge Easterbrook for the proposition that "courts are inherently ill-suited for such a role both because they lack the ability to gather, and the expertise to process, the necessary information."[13]

Conclusion: Antitrust is an important tool but cannot be relied upon as the only tool. There must be realistic expectations as to what the tool can accomplish. There also must be a regulatory partner to the judicial remedy of antitrust.

For a discussion of the evolution of antitrust law and its applicability to the current situation see Appendix One.

12 GEORGE J. STIGLER CENTER FOR THE STUDY OF THE ECONOMY AND THE STATE, THE UNIVERSITY OF CHICAGO BOOTH SCHOOL OF BUSINESS COMMITTEE FOR THE STUDY OF DIGITAL PLATFORMS, MARKET STRUCTURE AND ANTITRUST SUBCOMMITTEE REPORT 21 (Jul. 1, 2019) ("Stigler Antitrust Report"):

> The United Kingdom, the European Commission, Australia, and Germany have all published reports concluding that digital platforms' market power has indeed become entrenched. Surmounting the existing barriers to entry created by consumer behavior, cost structure, public policy, and any past anticompetitive conduct is extremely difficult. This fact has direct effects on consumers: *without entry or the credible threat of entry, digital platforms need not work hard to serve consumers because they do not risk losing their consumers to a rival.* (footnote omitted, emphasis in original).

13 Philip Weiser, *The Relationship of Antitrust and Regulation in a Deregulatory Era,* 50 ANTITRUST BULL. 549, 559-60 (2005), citing Frank H. Easterbrook, *Cyberspace Versus Property Law?*, 4 TEX. REV. L. & POL. 103, 108–10 (1999).

Using Regulatory Tools

Competitive goals—as well as consumer well-being—can be protected and promoted via regulation. In contrast to antitrust, regulatory policy can be broad-based and ex ante as opposed to case-specific and awaiting harm. As the U.K.'s expert antitrust agency, the Competition & Markets Authority (CMA) recently concluded in its "Online platforms and digital advertising" Market Study final report:

- "The evidence set out in this market study shows there is an urgent need to develop a new pro-competition regulatory regime for online platforms. The CMA's existing powers are not sufficient to protect competition given the fast-moving, complex nature of the markets we have reviewed, and the wide-ranging, self-reinforcing problems we have identified within them.
- "We are calling on government to create a new pro-competition regulatory regime with strong ex ante rules which can be enforced rapidly and updated as required."[14]

Such reasoning applies equally to the U.S. policy environment.

The Digital Platform Agency (DPA)—would recognize the inherent limitations of trying to shoehorn digital realities into an agency created for the oversight of industrial activities.

The creation of a new independent federal regulatory agency—the Digital Platform Agency (DPA)—would recognize the inherent limitations of trying to shoehorn digital realities into an agency created for the oversight of industrial activities. The existing regulatory agencies are populated by good and responsible individuals, but these institutions bring with them decades of operational and jurisprudential precedent that inhibits the ability to address the dynamics of the new digital marketplace. Congress must establish a new set of expectations for behavior in the digital marketplace and those expectations should be overseen by a new digital agency.

Common Law Principles: The challenge in the digital era is how to protect consumers and promote competition without micromanaging a fast-paced and dynamic process of innovation. The solution is to focus on managing an unwanted outcome of an activity rather than dictating how that activity should be performed.

The demands of digital dynamism should be overseen with a new and more flexible regulatory approach. That approach can be found in the wisdom of common law concepts that have evolved since the Middle Ages. Congress should adopt these long-standing principles—particularly the duty of care and the duty to deal—in legislation establishing the DPA.

14 United Kingdom Competition and Markets Authority, ONLINE PLATFORMS AND DIGITAL ADVERTISING, (2020) ("CMA Final Report"), at 322.

The duty of care establishes the expectation that the provider of goods or services has the responsibility to attempt to identify and mitigate the adverse consequences of that activity. The evolving concepts of negligence and tort—encompassing more activity over time—for instance, find their roots in the duty of care. Who is responsible for minimizing losses and who is responsible for compensating for them when they occur?

This new light-touch oversight would be built around government-industry cooperation in the development of mechanisms to efficiently pursue pro-competition and pro-consumer goals.

The duty of care is applied in other activities of the federal government. For instance, auto safety regulation assumes a duty of care that goes back to the early 20th century and the birth of the automobile. A duty of care for automobiles can trace its roots to a time when the wheels on the car were wooden at the dawn of the automobile age. In the 1916 case MacPherson v. Buick Motor Co., Court of Appeals Judge Benjamin Cardozo applied the duty of care to the auto manufacturer even though the faulty part (here a wooden wheel) was made by a third party. "[T[he manufacturer. . . is under a duty to make it carefully. . . If he is negligent, where danger is to be foreseen, a liability will follow."[15]

The duty to deal establishes that the provider of an essential service has a duty to provide impartial access to that activity. As a consequence of the Black Death in some analyses and continuing thereafter, common law developments reflected economic circumstances in determining that commercial activities enjoying a "virtual monopoly" have special responsibilities. This meant that the operator of a ferry across a river had a duty to deal with all those who wanted to use his service, or the owner of a tavern had a duty to deal with hungry travelers.[16]

The duty to deal also finds modern enforcement in the federal government. As far back as the Pacific Telegraph Act of 1860, the law provided, "That messages received from any individual, company, or corporation, or from any telegraph lines connecting. . . shall be impartially transmitted in the order of their reception."[17] The provision "received from any" recognizes the inherent duty to deal, while the remainder of the provision codifies that it is a non-discriminatory right of access. Such concepts were subsequently extended to the telegraph's successor: the telephone.

Light-Touch Practices: In the industrial era regulatory oversight was not only through the application of duty of care expectations, but also through top-down, bureaucratic, and rules-based policies that often relied on prior-approval mechanisms and the ability to prescribe technical and quality standards. While the duty of care's responsibility to proactively identify and mitigate potential harms is as valid today as it ever was, its implementation through so-called "utility regulation," which relied in part on prior approval mechanisms, is inappropriate for the

15 MacPherson v. Buick Motor Co., 217 N.Y. 382, 111 N.E. 1050 (1916).

16 JBruce Wyman, *The Law of the Public Callings as a Solution of the Trust Problem,* 17 HARV. L. REV. 156 (1904); Norman F. Arterburn, *The Origin and First Test of Public Callings,* 75 U. PENN. L. REV. 411 (1927). This, of course, is not a unanimous view among those who have studied the development of the duty to serve. See, e. g., Charles M. Burdick, *The Origin of the Peculiar Duties of Public Service Companies,* 11 COLUM. L. REV. 514 (1911).

17 Pacific Telegraph Act of 1860, *An Act to Facilitate Communication between the Atlantic and Pacific States by Electric Telegraph,* Ch. 137, U.S. Stat., 36th Cong., 1st Sess. (Jun. 16, 1860), https://www.loc.gov/law/help/statutes-at-large/36th-congress/session-1/c36s1ch137.pdf.

application of fast-moving digital technology. In its place, a new agile regulatory model should be adopted. This new light-touch oversight would be built around government-industry cooperation in the development of mechanisms to efficiently pursue pro-competition and pro-consumer goals.

Non-Duplication: The DPA should not duplicate the activities of sector-specific federal agencies and the authority granted them by Congress. The Federal Trade Commission (FTC), for instance, would retain its traditional antitrust and deceptive practices enforcement responsibility. The authority of the DPA would fill the void created by encumbrances on the FTC's authority.[18] As Thomas McCraw explained in Prophets of Regulation, "the most important single consideration is the appropriateness of the regulatory strategy to the industry involved."[19] The "industry involved" with the DPA will be the consumer-facing digital activities of companies with significant strategic market status.

The ability of dominant digital companies to exploit bottlenecks to competition and to control the pace and scope of innovation through their control of data assets is an invitation to monopolization and other abusive practices.

Protecting Competition: To protect competition, the new agency's activities should embrace the common law duty to deal. For centuries, that duty has stipulated that dominant firms controlling essential assets or services should make them available on a non-discriminatory basis. The ability of dominant digital companies to exploit bottlenecks to competition and to control the pace and scope of innovation through their control of data assets is an invitation to monopolization and other abusive practices.

Supporting Antitrust Authorities: To support existing antitrust review the DPA should be designated as the expert agency in digital market activities. As such, the DPA's expertise should become an intrinsic part of investigations, merger reviews, and enforcement of remedies of digital companies undertaken by the Department of Justice (DOJ) and Federal Trade Commission (FTC).

Not Burdening Small Companies: The DPA should exercise its authority in a targeted manner. It is frequently argued (especially by the big companies) that "regulation hurts small companies." The activities of the DPA, thus, should pay principal attention to market-dominant companies with power, not only over markets, but also with the power to rewrite norms with practices that benefit themselves to the detriment of smaller companies.

One of the purposes of such regulatory oversight is to enjoy the benefits of competition-driven innovation. As such, the DPA's focus should be upon companies

18 *See* Federal Trade Commission Improvements Act of 1980, Pub. L. 96- 252, 94 Stat. 374, codified in part at 15 USC 57a(h); Federal Trade Commission, Commission Statement of Policy on the Scope of the Consumer Unfairness Jurisdiction (Dec. 17, 1980), reprinted in Int'l Harvester Co., 104 FTC 949, 1070 (1984); Terrell McSweeny, Psychographics, *Predictive Analytics, Artificial Intelligence, & Bots: Is the FTC Keeping Pace?*, 2 GEO. L. TECH. REV. 514 (2018).

19 Thomas K. McCraw, Prophets of Regulation, 306, HARVARD UNIVERSITY PRESS (1984).

that are systematically important by virtue of their economic or societal significance. The DPA should, as a matter of overarching policy, avoid imposing burdensome regulation where competitive alternatives are available or on small companies without significant market impact.

Consumer Privacy: At the root of the digital platform economy is the corporate appropriation and usage of consumers' personal information for profit. Privacy protection through consumer "consent" places the burden on the backs of the exploited; in its place should be "conduct" practices built around the common law concept of the duty of care. It is recognized that Congress is currently considering privacy legislation which may impact the final resolution of the scope of the DPA's authority.

The behavioral differences between traditional industries with relatively stable technology and new digital businesses with rapidly evolving capabilities demand a new approach to public oversight

Conclusion: The behavioral differences between traditional industries with relatively stable technology and new digital businesses with rapidly evolving capabilities demand a new approach to public oversight. Attempts to repurpose existing federal agencies perpetuates old procedures, practices and precedents developed for the realities of a different era. The solution must be more than attempting to clone industrial era regulatory tools to meet digital era needs.

For a discussion of the scope of responsibility for the DPA, see Appendix Two.

A New Approach to Regulation

As industrial factories replaced the small-scale production that previously defined economic activity it brought with it the need to develop management practices to oversee production at scope and scale. Industrial corporations turned to the only other large-scale enterprise, the U.S. Army, and hired West Point trained managers to run operations. The result was that 19th-century corporate management became a rules-based hierarchy.

The regulatory agencies developed during the industrial era adopted the management techniques of the companies they were built to oversee. Rule-based bureaucracies today remain the primary structure of the American government's approach to regulation.

Digital companies, in contrast, have abandoned rules-based management hierarchies in favor of agile management that utilizes the distributed capabilities of the network. Industrial production is a linear process—think: factory assembly line—where incremental activities are added in series to ultimately produce a finished product. Digital activity, in contrast, produces "never complete" products that evolve as technology and the market evolve. We only have to look at the software updates to our smartphones and computers to see such agile activity in action.

The challenge for 21st-century policymakers is to embrace agile regulation practices just as the companies have embraced agile management practices.

The challenge for 21st-century policymakers is to embrace agile regulation practices just as the companies have embraced agile management practices.

Why Not Bolt On Authority to an Existing Agency?: Every institution has its cultural commitments. Old agencies (even if their statutes are updated) are saddled with legacy precedents as "muscle memory." Thoughts, procedures and judicial decisions developed in a different time with different demands control thinking from the halls of the agency, to the halls of Congress, and to the corridors of corporate headquarters and law firms.

The DPA should have a "digital DNA." Existing agencies, as a result of their statute, staff, tradition and jurisprudence are infused with an inherently analog DNA. This is not a criticism of the dedicated individuals involved, but the simple reality is that their professional lives – let alone their personal lives – have been shaped by assumptions and practices that digital technology has pushed aside.

Such "digital DNA" includes commissioners and staff with specialized technological experience and capabilities. Creation of such specialized agencies has rich historical precedent. In the early life of the oversight of communications networks, for instance, Congress initially appended authority to the Interstate Commerce Commission. However, it was only a short time before Congress recognized that the technology required unique skills, and thus the Federal Communications

Commission was borne. Similar circumstances have resulted in the creation of specialized skill agencies as diverse as the Nuclear Regulatory Commission and the Commodity and Futures Trading Commission.

"Digital DNA" also means that in establishing oversight of the internet platforms it is insufficient to repurpose statutory expectations established in the industrial era, Digital market activities require marketplace expectations built around digital technology and its capabilities. Congress should, therefore, establish common law-derived digital market expectations rather than attempt to repurpose statutory expectations established long before the arrival of digital technology.

Digital market activities require marketplace expectations built around digital technology and its capabilities.

In the ongoing exercise of their existing responsibilities, current federal agencies are already stretched thin. To expect an agency such as the FTC—already enforcing antitrust, deceptive practices and other statutes—to add oversight of digital platform activities to its portfolio would defocus the agency from its essential tasks. The importance of the FTC's antitrust activities cannot be underestimated, especially in the post-COVID era where competition will be fighting not to become a COVID casualty.[20] The responsibilities of FTC, for instance, over both antitrust enforcement (including digital company mergers) along with oversight of traditional industrial activities as diverse as product labeling, advertising representations, funeral home practices, and robocalls should not be further diluted.

Rather than bolt on to and dilute an existing agency's responsibilities, it is preferable to start with a clean regulatory slate and specifically established congressional expectations.

Regulatory Agility: The concept of agile regulatory responsibility is contrary to the bureaucratic culture that has developed over decades of industrial regulation. In the digital era, Congress should establish the broad parameters of acceptable behavior and empower the DPA to apply those concepts in the ever-evolving digital environment.

Companies often complain the current regulatory model is too rigid for the rapid-paced change of digital technology and thus thwarts innovation and investment. This is the basis of the "permissionless innovation" mantra that has held government involvement at bay for so long. Although it is debatable whether regulation imposes "permission" to innovate, the argument that the existing industrial era hierarchical rules-based regulation is inflexible has validity.

Yet attempts at agile regulation built on the application of general conduct concepts have also been opposed by the digital companies. Despite its successful use in corporate management, such circumstances-based agility suddenly becomes "regulatory uncertainty" when adopted by government.

The arguments against rules-based regulation as "too rigid" and agile regulation as "uncertain" deliver a common result: no regulation. The era of "we make our own rules" must come to a close through the application of agile government oversight.

A New Cooperative Industry-Government Regulatory Model: The new agency must eschew the old top-down and rigid regulatory model in favor of a new, more flex-

20 Nancy L. Rose, *Will Competition Be Another COVID-19 Casualty?,* THE HAMILTON PROJECT (Jul. 16, 2020), https://www.brookings.edu/research/will-competition-be-another-covid-19-casualty/.

ible structure that involves the digital companies in the cooperative development of policies.

At the heart of this new regulatory model is a Code Council composed of industry and public representatives possessing demonstrated expertise. The role of the Code Council is to implement the behavioral principles of the statute through codes of conduct. The role of the DPA thus becomes that of a supervisor of code development and enforcer of the results of a joint public-private effort to establish behavioral codes that carry out the purposes of the statute.

The new agency must eschew the old top-down and rigid regulatory model in favor of a new, more flexible structure that involves the digital companies in the cooperative development of policies.

While not an exact analog, the Code Council concept finds precedent in industry-developed, yet governmentally enforced practices for fire codes and building codes. Similarly, the DPA has attributes such as those found in the government-authorized, but non-governmental Financial Industry Regulatory Agency (FINRA) that oversees the operation of brokerage firms and exchange markets. The decisions of FINRA are supervised by the Securities and Exchange Commission (SEC) which acts as the ultimate regulator. Similarly, the decisions of the Code Council would be supervised by the DPA.

The Code Council of the Digital Platform Agency would, on its own motion, public petition, or at the request of the DPA, act through a multi-step process to develop and recommend a code of specific practices to the DPA.

The Makeup of the DPA: The new agency will be composed of three presidentially appointed, Senate-confirmed commissioners, one of whom will be Chairman with the powers of the chief executive officer of the agency. The Commissioners should have staggered five-year terms and no more than two commissioners may be members of the same political party.

It is essential that the commissioners and staff of the DPA have digital DNA. Not only does this mean hiring computer scientists but also appointing commissioners with demonstrated expertise in the management of the digital environment. The prevailing practice of appointing former congressional staffers to commissioner posts should be avoided absent the appointee having digital experience beyond Congress.

Use of Machine Intelligence: The DPA cannot be expected to oversee the tsunami of data-driven activity of the digital platforms only through human inspection. The digital economy is algorithm-driven and increasingly reliant on artificial intelligence. To try and keep pace with this algorithmic activity without utilizing similar tools would be to condemn the new agency to viewing the digital marketplace through a straw.

Conclusion: A new agile approach to regulatory oversight is required to deal with the fast-paced nature of digital technology and its marketplace impact. In broad terms, such an approach should be built around the common law-derived principles of duty of care and duty to deal and oriented towards risk management rather than micromanagement. To accomplish this, the Digital Platform Agency should identify risks to consumers and competition and respond through the initiation and approval of cooperatively developed and enforceable behavioral codes, accompanied by enforcement authority. Where such cooperative activity does not produce results acceptable to the DPA, the agency will act on its own. For a discussion of the workings of the DPA, including the Code Council, see Appendix Three.

Authors' note

As the authors have emphasized, the digital economy is one of rapid and constant change. This paper proposes a form of agile regulatory oversight to protect consumers and competition that reflects such rapid change.

In the digital world products are released and then modified/improved based on technical and market developments. This report should be no different.

The authors have intentionally discussed concepts as opposed to specific statutory language. Not only do we anticipate new technology, but also new studies and analyses, as well as new governmental actions. Such events may add to the knowledge and/or change the politics of this discussion. Undoubtedly, this paper, as an agile document itself, will be informed by these developments.

Appendix 1: Antitrust as a Solution

The antitrust laws protect competition, the United States' fundamental national economic policy,"[21] *and they should be applied to major digital platforms just as to other actors in the economy. It is important in the context of the platforms, however, to assess as carefully as possible what antitrust enforcement can accomplish and how reliably it can do so.*

This review concludes, just as others on both sides of the Atlantic that have studied the issue, that enforcement of competition laws is useful but not sufficient.[22]

To be effective, antitrust enforcement in this realm should be accompanied and aided, not superseded, by a specialized regulatory agency. Support for this view can be found, among other places, in the debate over the "essential facilities" doctrine, the substance of which centers upon whether firms controlling non-replicable assets should be required to make them available. In essence, it asks if these firms should be required to deal with competitors. The conclusion that there is an antitrust law duty to deal inevitably raises a new controversy centered on the capacity of generalist judges to administer complex conduct remedies, a consideration ameliorated by the presence of a specialized regulatory agency.

Expectations for antitrust enforcement should be realistic.

This study does not address whether any of the numerous antitrust investigations of major digital platforms undertaken in 2019 and 2020 should lead to prosecutions. Rather, consistent with the Stigler Antitrust Report, the product of a distinguished committee of scholars convened under the auspices of the University of Chicago Business School, it considers what would be required to introduce meaningful competitive alternatives to the platforms in light of their characteristics.[23]

Expectations for antitrust enforcement should be realistic. Any antitrust prosecution, and especially one pursuant to the Sherman Act's monopolization provisions,

21 Carnation Co. v. Pacific Westbound Conf., 383 U.S. 213, 218 (1966).

22 *See*, e.g., DG Comp, Special Advisors [Jacques Crémer, Yves-Alexandre de Montjoye, Heike Schweitzer], COMPETITION POLICY FOR THE DIGITAL ERA, (Final Report, 2019) ("Vestager Report"); Jason Furman, UNLOCKING DIGITAL COMPETITION, Report of the Digital Competition Expert Panel, (Mar. 2019) ("Furman UK Report"); Stigler Antitrust Report, *supra* note 12; CMA Final Report, *supra* note 14; United Kingdom Competition and Markets Authority, ONLINE PLATFORMS AND DIGITAL ADVERTISING MARKET STUDY, (Interim Report, 2019) ("CMA Interim Report"). For an account of other domestic and foreign initiatives addressing major platform issues included in a broad and critical review of the major platforms, see DIPAYAN GHOSH, TERMS OF DISSERVICE: HOW SILICON VALLEY IS DESTRUCTIVE BY DESIGN, Brookings Institution Press (Jun. 16, 2020), at 30–38, 212–219.

necessarily confronts a range of practical considerations. For digital platforms such as Google, Facebook, and Amazon, they include the unavoidable uncertainties surrounding litigated outcomes; the time to resolution; the changes in technology, business models, and consumer preferences that will occur inside the time envelope; and the difficulty in conceiving remedies that are sure to bring net benefits.

The need for something beyond what contemporary antitrust orthodoxy reliably enables has been highlighted in the previously noted studies. This study seeks to build on their recommendations, which converge both upon obligatory access to data aggregations, obligatory interoperability of digital platforms, and prohibitions on discrimination and upon the need for a specialized regulatory agency to interpret and enforce these requirements. If effected, these proposals would complement competition law requirements and in particular could abet a species of antitrust remedies that, while precedented, has fallen out of favor.

These proposals would complement competition law requirements and in particular could abet a species of antitrust remedies that, while precedented, has fallen out of favor.

Threshold Issues

The question of whether the antitrust laws can be relied upon to ameliorate the concerns presented by the major digital platforms and their strong positions in the marketplace is affected by two considerations.

First, involving liability. Over the last several decades, the prevailing interpretation has progressively narrowed the reach of the antitrust laws, making both government and private actions against claimed anticompetitive activities difficult to sustain. Very recently, this prevailing orthodoxy has come under fierce attack, but

23 STIGLER ANTITRUST REPORT *supra* note 12, at 59–60:

> [R]apid self-correction in markets dominated by large digital platforms is unlikely, and … harms to economic welfare from the exercise of market power in such markets are substantial. [E]ntrants find it difficult to overcome the high barriers to take on digital platform incumbents. Economies of scale, economies of scope, network effects, and negligible marginal cost all work together to make entry difficult in existing markets. Moreover, while monopoly profits are a lure to competitors, incumbents can use those very profits to entrench themselves and protect their position. No matter how dynamic the technology, an entrant will not unseat a monopolist if the monopolist is permitted to buy the dynamic entrant for a share of monopoly profits. Both parties gain from such a transaction—and the public loses.
>
> The result is less entry than a more competitive environment would create. Less entry into digital markets means fewer choices for consumers, stunted development of alternative paths of innovation, higher prices, and lower quality. Self-correction is not a realistic expectation in this environment—indeed, the available evidence suggests it has not happened—and public policy should not rely exclusively on it..

24 *See*, e.g., DG Comp, Special Advisors [Jacques Crémer, Yves-Alexandre de Montjoye, Heike *See*, e.g., CMA INTERIM REPORT, *supra* note 22, at 230, 232:

> [O]ur study supports the high-level positions set out in the Furman Review and the Stigler Center Review earlier this year, both of which called for stronger ex ante rules to address the competition concerns arising from the increasingly important role that large online platforms play in the economy. . .
>
> [T]he interventions that we consider. . . would need some form of regulatory body to implement them. This is consistent with the findings of the Furman Review, which called for a Digital Markets Unit to be created in the UK, and the Stigler Center Review, which called for the creation of a Digital Authority in the US.

there is not yet any firm indication of any material adjustments. Non-intervention remains the default position.[25]

Second, involving remedy. Even if there were major adjustments in the proper reach of the antitrust laws, many of the concerns presented by the largest digital platforms would fall outside of plausible antitrust-based enforcement and remediation. Many of the negative externalities that are inherent in the platforms' business models lie outside of the reach of antitrust unless it were to produce large increases in competition accompanied by very large increases in the variety of offerings. It's not realistic to expect antitrust to have an important influence on privacy, data security, hate speech, imminent incitements to violence, malign foreign influence, or misinformation. Amelioration of these and other similar problems will have to come, if at all, from other sources, especially if they are to be dealt with in anything like the near-term.[26] But even more limited aspirations addressing only narrowly defined economic issues present very serious challenges with respect to remedies. This is where the learning surrounding the essential facilities doctrine is instructive.

Many of the negative externalities that are inherent in the platforms' business models lie outside of the reach of antitrust.

Taken together, the state of the relevant jurisprudence and numerous associated practical considerations cast a shadow over the efficacy of existing competition laws as a major—let alone the principal—legal mechanism securing society's interests in the operations of major platforms. Describing the considerations involved in deploying the antitrust laws against digital platform power raises the question—a very significant one—of whether it would be better to look elsewhere

25 *See*, e.g., STIGLER ANTITRUST REPORT *supra* note 12, at 72:

> [O]versimplified Chicago School thinking has provided a widely accepted framework for antitrust analysis for more than thirty years. Perhaps more importantly, many federal judges, appointed by an increasingly ideological vetting process, are trained in and adherents of that framework. Many seem unaware of new economic research that calls into question many of the tenets of that framework and continue to cite outdated Chicago School publications of the 1970s and 1980s. And, while there has been a great deal of economic research and literature on which a new antitrust paradigm could be constructed, there is not a widely accepted, alternative paradigm that is comprehensible to and administrable by lawyers and judges. Even if such a paradigm were written tomorrow and rapidly became widely accepted, it would likely take years for that paradigm to be manifest in doctrinal changes and market outcomes.

26 *See*, e.g., Carl Shapiro, *Protecting Competition in the American Economy: Merger Control, Tech Titans,* Labor Markets, 33 J. ECON. PERSPECT. 69, 79 (2019):

> Antitrust is not designed or equipped to deal with many of the major social and political problems associated with the tech titans, including threats to consumer privacy and data security, or with the spread of hateful speech and fake news. Indeed, it is not clear that more competition would provide consumers with greater privacy or would better combat information disorder; unregulated competition might instead trigger a race to the bottom, and many smaller firms might be harder to regulate than a few large ones. Addressing these major problems requires sector-specific regulation.

See also, Statement of Joan Donovan, Director, Technology and Social Change Research Project, Harvard Kennedy School's Shorenstein Center On Media, Politics and Public Policy, Hearing on "Americans at Risk: Manipulation and Deception in the Digital Age," before the Subcommittee on Consumer Protection and Commerce of the Committee on Energy and Commerce, U.S. House of Representatives (Dec. 5, 2019), https://energycommerce.house.gov/sites/democrats.energycommerce.house.gov/files/documents/010820%20CPC%20Hearing%20Testimony_Donovan.pdf

for such assurances or to add complementary, compensatory legal authorities to the existing jurisprudential mix.[27]

This is not to say that the use of the antitrust laws should be abandoned. If history is a guide, there is a meaningful possibility that antitrust enforcement activities will produce value commensurate with their costs.

Basis for Antitrust Enforcement

The jurisprudential bases for the government investigations and any ultimate interventions are Section 2 of the Sherman Act, 15 U.S.C. § 2, and Section 7 of the Clayton Act, 15 U.S.C. § 18.

Section 2 of the Sherman Act makes it illegal to "monopolize, or attempt to monopolize, or combine or conspire. . . to monopolize any part of. . . trade or commerce." Section 2 does not make the holding of a monopoly illegal, nor does it make certain exercises of monopoly power illegal. In this regard, it is considerably narrower than its European counterpart, which makes abuse of a dominant position (essentially, monopoly leveraging in U.S. jurisprudence) actionable. What Section 2 does make illegal is the acquisition or maintenance of monopoly through impermissible means. The principal judicial elaboration on the statutory text does not provide a high degree of clarity. The offense of monopoly under Section 2 of the Sherman Act has two elements: (1) the possession of monopoly power in the relevant market; and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.[28] The indeterminate aspect of this important legal standard has been commented upon regularly for more than a century, quite often with a certain asperity.[29]

Section 7 of the Clayton Act, the principal merger control provision in U.S. law, forbids acquisitions "the effect of [which] may be substantially to lessen competition, or to tend to create a monopoly." The provision, which in one form or another has been around since 1914, was significantly strengthened by an amendment in 1950 and by the passage of the Hart-Scott-Rodino Antitrust Improvements Act in 1976. The latter provision subjects any merger or acquisition of significant size to pre-merger review by the Antitrust Division or the Federal Trade Commission. While not literally requiring merging firms to obtain prior government approval, the effect of the process is not dissimilar. The antitrust agencies, while retaining the burden of proof that a merger may substantially lessen competition, have the opportunity to seek an injunction against the consummation of any suspect transaction. The conventional use of Section 7, then, involves challenging question-

27 Furman UK Report, *supra* note 22, at 5; STIGLER ANTITRUST REPORT, *supra* note 12, at 8:
> While US antitrust law has long been flexible in combating anticompetitive conduct, there is increasing concern that it has been underenforced in recent years. Antitrust law and its application by the courts over the past several decades have reflected the now outdated learning of an earlier era of economic thought, and they appear in some respects inhospitable to new learning. Antitrust enforcement better suited to the challenges of the Digital Age may therefore require new legislation.

See also id., at 64–65.

28 United States v. Grinnell Corp., 384 U.S. 563 (1966).

able acquisitions before they can be consummated. Although it is not commonly employed, Section 7 also enables litigants to undo mergers after they have been consummated.[30]

The last two significant government monopolization prosecutions, against AT&T and Microsoft, both technology companies, provide illustrations of the challenges inherent in Section 2 enforcement. They afford a reflection on the protracted nature of judicial proceedings, the possibility of changing technology and business models while litigation is pending, and what may be most important of all: the uncertainty of what would come from a successful prosecution.

The last two significant government monopolization prosecutions, afford a reflection on the protracted nature of judicial proceedings.

The Microsoft case provides a particularly vivid example of the dynamic marketplace changes that could be expected in the course of a Section 2 prosecution of a technology sector defendant.

> *According to. . . the Department of Justice, Microsoft promoted the use of its own internet browser by integrating it into its Windows software, negotiating exclusive dealing contracts with internet service providers and software producers, cutting deals with computer makers to install the browser on all new computers they sold, and threatening those who made similar arrangements with other browser companies with a loss of business. A federal district court found Microsoft in violation of the Sherman Act and ordered the company broken up. An appeals court vacated the breakup order and reversed some of the lower court's findings, but it affirmed other findings and remanded still others for further consideration. Microsoft then settled the case. . . After the settlement, Microsoft's browser sank into obscurity, but so did the competing browsers that were the main beneficiaries of the antitrust action.*

29 *See* Shapiro, *supra* note 26, at 80: "The portion of the Sherman Act dealing with monopolies is remarkably broad—and vague." Gregory J. Werden, *How Chief Justice White Hampered Development of Limiting Principles for Section 2 of the Sherman Act and What Can Be Done About It Now,* 13 OHIO ST. BUS. L.J. 63, 96 (2019): "The Supreme Court took nearly a century to articulate what Section 2 does and does not prohibit and still has not crystallized the limiting principles courts have groped for since 1891." And *see* Herbert Hovenkamp, *The Monopolization Offense,* 61 OHIO ST. L.J. 1035, 1049 (2000):

> Perhaps unfortunately, nothing in the monopolization statute defines precisely, or even generally, when government intervention is necessary. Given this lack of a statutory definition and our underlying commitment to markets, one must conclude that antitrust intervention is appropriate only when we can have some confidence that intervention will make a particular market work better. Further, the improvements have to be sufficient to justify the expenses and uncertainty costs that accompany intervention, and these can be substantial. Finally, monopolistic conduct comes in unlimited varieties, many of which cannot even be anticipated until the technology that makes them possible has been developed. This gives the judge the unusually difficult task of applying extremely open-ended statutory language to an exceptionally open-ended set of circumstances. As a result, about the best we can do is define monopolization at a high level of generality and hope that our federal tribunals are both undaunted and circumspect.

30 United States v. E.I. du Pont de Nemours & Co., 353 U.S. 586 (1957); Saint Alphonsus Med. Center-Nampa Inc. v. St. Luke's Health Sys., Ltd., 778 F.3d 775 (9th Cir. 2015); Steves & Sons, Inc. v. Jeld-Wen, Inc., Civil Action No. 3:16-cv-545 (E.D. Va. Apr. 16, 2018). While indicating that Section 7 can be used against consummated mergers, Professor Hemphill describes why antitrust prosecutors could find Section 2 to be a better mechanism. C. Scott Hemphill, *Disruptive Incumbents: Platform Competition in an Age of Machine Learning,* 119 COLUM. L. REV. 1973, 1986-1989 (2019).

> *In 2008, Google introduced Chrome, a new browser that quickly swept away the competition. Ten years later Chrome had a 63 percent share of the global browser market, with Apple's Safari a distant second at 14 percent. The browsers involved in the antitrust suit had been completely left in the dust.*[31]

To increase the possibility that competition will improve the overall performance of the major platforms, especially within reasonable timeframes, more than conventional antitrust prosecutions and remedies will be required.

The AT&T case, which commenced 45 years ago, ended in a settlement that broke up the country's tightly vertically integrated telephone system. More than nine years elapsed between the filing of the complaint and the implementation of the settlement.

Assessing the time involved in the Microsoft prosecution requires an arbitrary judgment due to the fact that the monopolization complaint, filed in 1998, had a series of antecedents. As a formal matter, the 1998 complaint ended in a settlement in 2002; a more inclusive account of the controversy begins with an FTC investigation in 1990 and ends with judicial approval of the settlement in 2004. Unlike AT&T, Microsoft led not to structural changes but conduct requirements that generally have been judged to have been ineffective, at least in a formal sense.[32]

Platforms and Antitrust

With respect to the digital platforms, the most important contribution of antitrust—to the extent it creates additional competition—is likely to be increasing dynamism in an already dynamic sector. This was the explicit aim and formal result in *U.S. v. AT&T* and the informal result in *U.S. v. Microsoft.*

Notwithstanding indisputable economic concentration and serious negative externalities, the sector produces a great deal of value.[33] The question is, could

31 Naomi R. Lamoreaux, *The Problem of Bigness: From Standard Oil to Google,* 33 J. ECON. PERSPECT. 94, 111 (2019) (citations omitted).

32 *See* F.M. Scherer, *Technological Innovation and Monopolization,* Faculty Research Working Paper Series, John F. Kennedy School of Government, Harvard University (Oct. 2007). Professor Scherer, one of the United States' leading antitrust economists, provides an informative perspective on the AT&T and Microsoft cases, at 13–24, 37–47. After reviewing several significant antitrust prosecutions, including AT&T and Microsoft, Professor Scherer concluded at 47–48:

> In a majority of the cases, it took far too long, and in some instances several attempts, to come to grips with the problems. By the time the courts were ready for judgment, technological and economic changes had radically altered the environment in which the remedies originally sought would apply. This holds true for the unusually expeditious Microsoft litigation, which, at least in the United States, achieved little or nothing in the end. The most rapid solutions were achieved though negotiated consent decrees, which require a belief on the part of the respondents that they will not be seriously disadvantaged. In. . . AT&T (1982), the corporate settler [was] too optimistic—the decree[] did open up avenues for substantially enhanced technological competition. . . In Microsoft, Judge Jackson struggled admirably to weigh the benefits of browser integration against competitive harm, but his efforts were insufficient to convince a skeptical Court of Appeals fearful of impeding technological progress and reluctant to undertake the job on its own.

33 *See* Ghosh, *supra* note 22, at 28, noting that even as criticism of the major platforms has grown, "the vast majority of internet users" continue to regard the consumer internet firms as providing "the tremendous gift of connectivity."

it produce even more? To increase the possibility that competition will improve the overall performance of the major platforms, especially within reasonable timeframes, more than conventional antitrust prosecutions and remedies will be required. The most efficacious single adjustment to the status quo would involve providing third parties—competitors and potential competitors—rights of access to the "essential facilities" controlled by the major platforms. Imposing a duty to deal with respect to data sets required to offer targeted advertising offers the possibility of increased competition. Imposing a duty to deal with respect to the elements of ad tech required to serve digital advertising also offers the promise of increased competition. So too does requiring interoperability among competing platforms. The other previously noted studies of the major platforms reached the same conclusion.[34] More competition would lead to improved economic performance with the predictable consequences that advertisers would pay less and publishers would receive more in the case of targeted advertising, and more generally the public would see some improvement in the quantity and quality of the information and services that it receives online.

Part of the reason legislation will be required lies in the contemporary interpretation of the proper scope of the substance and enforcement of the antitrust laws.

However, the imposition of duties to deal, as a matter of antitrust remediation is extremely fraught given the inherent delays and uncertainty endemic to antitrust litigation, among other reasons. If it is to happen, and especially in any meaningful timeframe, it almost certainly will have to happen by legislation.

The Chicago School and its Critics

Part of the reason legislation will be required lies in the contemporary interpretation of the proper scope of the substance and enforcement of the antitrust laws by their authoritative interpreters: the courts and federal prosecutors.

This comes in the midst of a debate about the proper role and administration of antitrust law—a fierce, direct encounter between the long-entrenched Chicago School and insurgents often described as Brandeisians, to oversimplify. The debate involves numerous differences in emphasis and approach, between perspectives viewing government intervention in the economy as normally unwarranted and harmful and, alternatively, viewing government intervention as necessary to protect competition, economic dynamism, and other values.

The Chicago School, so named because associated with the work of scholars at the University of Chicago Law School in the mid-twentieth century, is and has been for more than forty years the single most important source of antitrust wisdom. It advances a set of policy perspectives grounded on the view that the ability of the antitrust laws to produce effective, let alone timely, improvements in most cases is doubtful, even as against firms with undoubted market power.[35]

The source of that aversion—illustrated most vividly in the Chicago School's disinclination to interfere with single firm conduct—is that market power is not likely sustainable over extended periods because its exercise will invite entry, that hard competition is desirable and should be welcomed rather than deterred, and

34 *See supra* note 22.

35 For an interesting and admittedly tendentious history, see BINYAMIN APPELBAUM, THE ECONOMIST'S HOUR: FREE MARKETS AND THE FRACTURE OF SOCIETY, Little Brown & Co. (2019).

that false positives, mistakenly identifying violations, are more pernicious than false negatives, failing to identify violations. In other words, except for naked cartel behavior, it is better to leave the market to sort things out.[36]

In considering digital platforms, the traditionalists focus on the established legal elements. In rigorously defined economic markets, is there a basis for believing that a platform has market power? If so, how did it acquire and maintain it, through appropriate or exclusionary means? And if a digital platform company has market power, is it sustainable, or, alternatively, is there a basis for expecting it to be superseded by others as technology, business models, and consumer preferences evolve? More broadly, is this a winner-take-all circumstance where monopoly is inevitable because of high fixed costs, network effects, or other circumstances? And if it is, would it be better to leave well enough alone because intervention would simply add costs without producing any benefits?

The willingness to expand the focus of antitrust from narrowly defined economics represents one of the major differences from the traditionalists.

The Brandeisians ask many of the same questions, but they tend to add (or more strongly weight) concerns about the negative externalities that many of the major platforms produce.

> *[Brandeisians] claim that Google, Amazon, and other giant tech firms are exploiting blatantly anticompetitive practices to block potential rivals—and getting away with it by manipulating the political system. They are particularly worried that current antitrust orthodoxy, which is preoccupied with the issue of harms to consumers, has left the country all but defenseless against bigness's other ills.*[37]

The willingness to expand the focus of antitrust from narrowly defined (as in price theory) economics represents one of the major differences from the traditionalists. A consequence of this more expansive vision of antitrust law, they are considerably more inclined to recommend intervention and extensive forms of relief.[38] In a sense, the insurgents are making a pragmatic argument: the "cash value" of the Chicago School approach hasn't merely diminished, it has become negative.

The argument is taking place in the usual policy circles: think tanks, universities, and Congress. Although nothing like a consensus about adjusting the approach to most forms of antitrust enforcement has emerged, the distance between the disputants is noticeably narrower in the case of mergers, where there appears to be a recognition that enforcement should be tightened.[39] It is important to recognize, however, that the intellectual debate hasn't produced any change in direction at the ultimate locus of antitrust orthodoxy—the courts and especially the Supreme Court.

Platform Oversight

Unsurprisingly, the intellectual argument very often has centered on the issues presented by the major digital platforms. And in the specific case of the digital platforms, it has moved beyond the academy. This has been apparent in the Eu-

36 For influential statements to that effect, see Robert Bork, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF, BASIC BOOKS, INC. (1978) and Frank Easterbook, *The Limits of Antitrust,* 63 TEX. L. REV. 1 (1984).

37 Lamoreaux, *supra* note 31, at 94 (citations omitted).

38 For an influential expression of these views, see Lina Khan, *Amazon's Antitrust Paradox,* 126 YALE L.J. 710 (2017).

ropean Union for several years.[40] In the United States, notwithstanding Chicago orthodoxy, the major platforms recently have become subject to government antitrust scrutiny on an unprecedented level. The heads of the federal antitrust agencies repeatedly have indicated that the antitrust laws are sufficiently flexible to address the competitive issues implicated by the major platforms. They have articulated the view that the "consumer welfare standard" that constitutes the prevailing approach to interpreting and enforcing the antitrust laws is not limited to structure and conduct producing price effects. Rather, they have defended the view that considerations of quality and innovation, among other things, have an important place.[41] If not a departure from the orthodoxy of the last forty years, it is something of a change in emphasis.

The major platforms recently have become subject to government antitrust scrutiny on an unprecedented level.

Well before the end of 2019, the Antitrust Division had acknowledged a formal investigation of Google; the FTC had undertaken a similar investigation of Facebook; a very broad coalition of State Attorneys General had announced investigations of both; and a Committee of the House of Representatives had sent sweeping document requests to Google, Facebook, Amazon, and Apple. In addition, very unusually, the U.S. Attorney General and Deputy Attorney General had indicated a broad investigation into digital platforms, including but going beyond Google and Facebook. And in early 2020, the FTC announced that it had initiated a detailed

39 This recognition isn't limited to the United States. *See* FURMAN UK REPORT, *supra* note 22, at 6, 11–12:

> [H]istorically there has been little scrutiny and no blocking of an acquisition by the major digital platforms. This suggests that previous practice has not had any 'false positives', blocking mergers that should have been allowed, while it may well have had 'false negatives', approving mergers that should not have been allowed. … Acquisitions have included buying businesses that could have become competitors to the acquiring company (for example Facebook's acquisition of Instagram), businesses that have given a platform a strong position in a related market (for example Google's acquisition of DoubleClick, the advertising technology business), and data-driven businesses in related markets which may cement the acquirer's strong position in both markets (Google/YouTube, Facebook/WhatsApp). Over the last 10 years the 5 largest firms have made over 400 acquisitions globally. None has been blocked and very few have had conditions attached to approval, in the UK or elsewhere, or even been scrutinised by competition authorities. (footnote omitted)

40 *See*, e.g., European Commission Decision of 27 June 2017, Case AT. 39740 Google Search Shopping; European Commission Decision of 18 June 2018; Case AT. 40099 Google Android; European Commission Decision of 20 Mar. 2019, Case AT. 40411 Google AdSense. Each of these decisions is subject to judicial review.

41 *See*, e.g., Jeffrey A. Rosen, Deputy Attorney General, Remarks, Free State Foundation, Washington, DC, (Mar. 3, 2020); Makan Delrahim, *All Roads Lead to Rome: Enforcing the Consumer Welfare Standard in Digital Media Markets,* (remarks at Jevons Colloquium, Rome, Italy) (May 22, 2018); and Makan Delrahim, *'…And Justice for All': Antitrust Enforcement and Digital Gatekeepers,* (speech at Antitrust New Frontiers Conference, Tel Aviv, Israel) (June 11, 2019):

> Price effects alone do not provide a complete picture of market dynamics, especially in digital markets in which the profit-maximizing price is zero. As the journalist Franklin Foer recently said, "Who can complain about the price that Google is charging you? Or who can complain about Amazon's prices; they are simply lower than the competition's." Harm to innovation is also an important dimension of competition that can have far-reaching effects. Consider, for example, a product that never reaches the market or is withdrawn from the market due to an unlawful acquisition. The antitrust laws should protect the competition that would be lost in that scenario as well.

Section 6(b) study of every acquisition, no matter how small, undertaken by five of the major platform companies since 2010.[42]

Remedial Proposals

A successful competitive milieu would require extensive government intervention.

In addition to the prosecutorial exercises, there have been the previously noted studies and recommendations.[43] Their conclusions have converged on critical points: network effects and single homing, high fixed costs, and enormous and constantly growing data accumulations. All of these make successful commercial challenges (and even the threat of challenges) to the major digital platforms implausible. For example, the Stigler Report concluded:

> *Economies of scale, economies of scope, network effects, and negligible marginal cost all work together to make entry difficult in existing markets. Moreover, while monopoly profits are a lure to competitors, incumbents can use those very profits to entrench themselves and protect their position. No matter how dynamic the technology, an entrant will not unseat a monopolist if the monopolist is permitted to buy the dynamic entrant for a share of monopoly profits. Both parties gain from such a transaction—and the public loses.*
>
> *The result is less entry than a more competitive environment would create. Less entry into digital markets means fewer choices for consumers, stunted development of alternative paths of innovation, higher prices, and lower quality. Self-correction is not a realistic expectation in this environment—indeed, the available evidence suggests it has not happened—and public policy should not rely exclusively on it. Effective antitrust enforcement and regulation must take account of this reality. If there is a force toward self-correction, it may require active promotion to succeed, and in this way public intervention can be complementary rather than antagonistic to market forces. Indeed, the other reports that have addressed this problem around the world have accepted that policy changes are necessary in order to avoid stagnant and harmful digital markets.*[44]

In consequence, these studies generally conclude that a successful competitive milieu would require extensive government intervention.[45]

Several significant intimations involving focus and scope have emerged in the course of the federal digital platform investigations. The Assistant Attorney General in charge of the Antitrust Division has suggested the possibility that search

42 FTC Press Release, *FTC to Examine Past Acquisitions by Large Technology Companies.* (Feb. 11, 2020), https://www.ftc.gov/news-events/press-releases/2020/02/ftc-examine-past-acquisitions-large-technology-companies.

43 *See supra* note 22.

44 STIGLER ANTITRUST REPORT, *supra* note 12, at 59–60.

45 *Id.* at 21:

> The United Kingdom, the European Commission, Australia, and Germany have all published reports concluding that digital platforms' market power has indeed become entrenched. Surmounting the existing barriers to entry created by consumer behavior, cost structure, public policy, and any past anticompetitive conduct is extremely difficult. This fact has direct effects on consumers: *without entry or the credible threat of entry, digital platforms need not work hard to serve consumers because they do not risk losing their consumers to a rival.* (footnote omitted, emphasis in original).

and social media could be relevant markets for Section 2 purposes;[46] and he and the Deputy Attorney General have adverted to the possibility that the accumulation of personal data could be the source of market power.[47] The Chairman of the Federal Trade Commission and the Director of its Bureau of Competition have spoken about the possibility of post-consummation enforcement to undo mergers in the context of the major digital platforms.[48] Assuming as seems reasonable that these statements describe the direction and expansiveness of the investigations that the respective agencies are undertaking, it seems entirely possible that they will conclude in major enforcement actions.

The various investigations should proceed to their conclusions as rapidly as possible, both out of fairness to the companies and also in light of the serious concerns that the companies' businesses present to society. The outcomes of the investigations could be significant and instructive, all the more so if they result in antitrust prosecutions.

The varying outcomes of the lengthy AT&T and Microsoft prosecutions highlight what may be the most significant issue surrounding antitrust enforcement against major digital platforms—identifying proposed remedies that will reliably be more beneficial than harmful. This is an essential consideration in determining whether to bring suit, and one likely to require as much analysis as the facts and circumstances that would support a finding of liability.[49]

The varying outcomes of the lengthy AT&T and Microsoft prosecutions highlight what may be the most significant issue surrounding antitrust enforcement against major digital platforms—identifying proposed remedies that will reliably be more beneficial than harmful.

Antitrust policy has long recognized that, everything else equal, structural remedies are preferable to conduct remedies because they alter economic incentives. But, of course, they also pose costs, both in the course of a divestiture, but also potentially in diminishing the defendant's ability to conduct its business efficiently.[50]

46 Nihal Krishan, Big Tech Investigation Focused on Abuse of Data, DOJ Antitrust Chief Says, WASHINGTON EXAMINER, (Nov. 26, 2019); Makan Delrahim, '…And Justice for All': Antitrust Enforcement and Digital Gatekeepers, (Speech at Antitrust New Frontiers Conference, Tel Aviv, Israel) (Jun. 11, 2019)

47 Makan Delrahim, Blind[ing] Me With Science, Antitrust, Data, and Digital Markets, (Remarks at Harvard Law School & Competition Policy International Conference on "Challenges to Antitrust in a Changing Economy," Cambridge, MA) (Nov. 8, 2019).

48 Cecilia Kang and David McCabe, F.T.C. Broadens Review of Tech Giants, Homing In on Their Deals, N.Y. TIMES (Feb. 11, 2020); David McLaughlin, FTC Chief Says He's Willing to Break Up Big Tech Companies, BLOOMBERG (Aug. 13, 2019; Remarks of Ian Conner, Fixer Upper: Using the FTC's Remedial Toolbox to Restore Competition, (Remarks at GCR Live 9th Annual Antitrust Law Leaders Forum, Miami Beach) (Feb. 8, 2020).

49 Professor Hovenkamp has observed that apart from the AT&T case:

> The United States does not have a good track record with enforced breakups for monopolistic practices. Aside from recent mergers, there is no obvious way to break up highly integrated digital platforms without doing serious harm to both consumers and investors. Breaking off individual features simply makes the platform less attractive to users but does little to alleviate monopoly. Any breakup that interferes with economies of scale will result in higher costs and very likely higher prices or decreased product quality. In any event, a breakup proposal must be more than rhetorical flourish. It must be accompanied by specifics showing which assets are to be spun off, as well as well-informed predictions concerning the impact on output, price, or quality.

(Statement of Herbert Hovenkamp, House Judiciary Inquiry into Competition in Digital Markets) (Apr. 17, 2020) (footnote omitted), https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=3183&context=faculty_scholarship

In the case of the major platforms, there are obvious divestiture candidates in the event that liability is established. Separating Google and YouTube or Facebook and Instagram would create some additional horizontal competition in the targeted advertising marketplace. In addition to horizontal divestitures, the possibility of requiring the divestiture of Google's ad tech business in whole or in part—for example, DoubleClick or AdMob—presumably would be studied.

Less drastic remedies, with concomitant less risk of imposing disproportionate costs, in the form of conduct remedies, also would be available (although structural and conduct remedies are not mutually exclusive, as the AT&T experience illustrates). The kinds of remedies suggested by the European Union's prosecutions—duties to deal and prohibitions on discrimination—could be imposed, although necessarily with substantial continuing requirements on the part of the government to contend with ambiguities and to monitor and police evasion.

There are very significant practical obstacles associated with a court's requiring an entity with market power to deal with its competitors.

The Essential Facilities Debate

To be sure, there are very significant practical obstacles associated with a court's requiring an entity with market power to deal with its competitors—to offer access to essential assets or services—on reasonable terms and conditions and to refrain from discrimination. Foremost among them is the ongoing requirement to determine what constitutes reasonable terms and conditions. And there is a very substantial question about whether courts rather than specialized regulatory agencies are equipped to deal with access remedies.

> *One area where regulatory agencies undoubtedly possess superior competence over antitrust courts is in the area of managing complex access arrangements. In the few cases where courts have waded into such matters, the experiment underscored that courts are not well-suited to manage such administration. . . As Judge Easterbrook put it, courts are inherently ill-suited for such a role both because they lack the ability to gather, and the expertise to process, the necessary information and because they do not face a reward structure that holds them accountable for the results of their quasi-regulatory efforts.*[51]

50 *See*, e.g., Peter Alexiadis and Alexandre de Streel, *Designing an EU Intervention Standard for Digital Platforms,* European University Institute, Robert Schuman Centre for Advanced Studies, Florence School of Regulation (2020) at 39–40:

> We take the view that a remedy of structural or functional separation should not be adopted because many of the benefits and efficiencies generated by digital platforms might be lost if their businesses were to be separated. Structural separation should only be imposed in very exceptional circumstances when the digital platform in question is very mature (in terms of the business model used and the acceptance of consumers of that model), demonstrates persistent indications of market failure, and behavioural remedies under ex post and ex ante disciplines have been demonstrated to be ineffective over a relevant period of time. Therefore, behavioural remedies imposed under competition law enforcement which can be effected in a timely manner or (when competition law is not sufficiently effective) under regulation should be preferred.

https://cadmus.eui.eu/bitstream/handle/1814/66307/RSCAS%202020_14.pdf?sequence=1&isAllowed=y

51 Philip Weiser, *The Relationship of Antitrust and Regulation in a Deregulatory Era,* 50 ANTITRUST BULL. 549, 559–60 (2005).

Notwithstanding these practical difficulties, as Professor Weiser observed, antitrust remedies of this sort have been imposed. The Supreme Court's 1912 decision in *Terminal Railroad,* involving access to a railroad bridge across the Mississippi River by competing railroads, established that the Sherman Act required monopolists to provide access to their "essential facilities" on reasonable terms and conditions.[52] This requirement was applied in various circumstances over the next several decades, most notably by the Supreme Court to newspaper wire services in *Associated Press*[53] and to electric power transmission in Otter Tail Power[54] and by the 7th Circuit to telecommunications in MCI.[55] Times have changed. The present state of affairs has been summarized in this fashion:

> *To describe the doctrine as controversial is a gross understatement; indeed, commentary on the nature of the doctrine often bears an uncanny resemblance to theological debate. Disagreement exists on almost every key issue including whether the doctrine exists at all (thus far the US Supreme Court has professed its agnosticism).*[56]

Justice Scalia's opinion for the Supreme Court in *Trinko*[57] contains extensive dicta in support of Chicago School orthodoxy, and in the process sets forth a perspective on the existence and availability of an essential facilities-based duty to deal. The *Trinko* majority leaves the clear impression that it is a bad idea. "Enforced sharing also requires antitrust courts to act as central planners, identifying the proper price, quantity, and other terms of dealing—a role for which they are ill-suited."[58] There is very little reason to believe that the majority of today's Supreme Court justices would disagree, with important implications for the availability of essential facilities remedies applicable to the major digital platforms. "If the Supreme Court applies *Trinko* broadly to the tech titans, then separate regulation might be needed to impose on the tech titans mandated interconnection or data sharing with rivals."[59]

Perhaps the most influential academic criticism of the essential facilities doctrine was that of Professor Areeda, one of the most important antitrust scholars of the latter half of the twentieth century.[60] But his criticism was qualified. The presence of a regulatory agency to relieve the courts of what he saw as an inappropriate supervisory obligation could make a difference:

52 United States v. Terminal R.R. Ass'n of St. Louis, 224 U.S. 383 (1912).

53 Associated Press v. United States, 326 U.S. 1 (1945).

54 Otter Tail Power Co. v. United States. 410 U.S. 366 (1973).

55 MCI Communications Corp. v. American Tel. & Tel., 708 F.2d 1081, 1132-33 (7th Cir. 1983).

56 Thomas Cotter, The Essential Facilities Doctrine, Encyclopedia of Law and Economics, Ch. 7 (2008).

57 Verizon Communications v. Law Offices of Curtis V. Trinko, 540 U.S. 398, 410-11 (2004).

58 Id. at 408. Then-Chief Judge Breyer's very influential Town of Concord v. Boston Edison Co. decision considers the difficulties confronting courts in supervising activities more conventionally assigned to regulatory agencies, citing among others, 3 *Areeda & Turner* 701, at 148–50 ("The courts correctly regard as uncongenial and foreign to the Sherman Act the burden of continuously supervising economic performance."). 915 F.2d 17, 25 (1st Cir. 1990).

59 Shapiro, *supra* note 26, at 83.

60 Phillip Areeda, Essential Facilities: An Epithet in Need of Limiting Principles, 58 ANTITRUST L. J. 841 (1990).

> *No court should impose a duty to deal that it cannot explain or adequately and reasonably supervise. The problem should be deemed irremedial by antitrust law when compulsory access requires the court to assume the day-to-day controls characteristic of a regulatory agency. Remedies may be practical when (a) admission to a consortium is at stake, especially at the outset, (b) divestiture is otherwise appropriate and effective, or (c) as in Otter Tail, a regulatory agency already exists to control the terms of dealing.*[61]

It would be a serious mistake to rely on antitrust enforcement as the sole mechanism for securing our society's interest in the workings of the ever more critical digital platforms.

This perspective--that the appropriateness and practical feasibility of judicial impositions in the nature of essential facilities remedies where a regulatory agency is available to oversee the inevitable complexities of price and other terms and condition--is shared by scholars more sympathetic to the doctrine.[62]

Supplementing Antitrust

As the preceding discussion indicates, it would be a serious mistake to rely on antitrust enforcement as the sole mechanism for securing our society's interest in the workings of the ever more critical digital platforms. Taken alone, the antitrust laws are not likely to produce a satisfactory response to perceived requirements for additional social controls applicable to the major digital platforms. The cases take too long to litigate, the outcomes inevitably are uncertain, and the remedial possibilities—whether structural or behavioral—will be complex.

This assessment changes, however, in the presence of a specialized regulatory agency. Given proper authority, a specialized agency would be able to regulate non-discrimination, access to data sets, interoperation, and similar requirements designed to lower barriers to competition with the major platforms, whether judicially imposed or agency imposed. The contingent and protracted nature of antitrust litigation would remain as obstacles to its utility as a sole source of social control, but the remedial complications could be ameliorated very substantially.

As is apparent, however, the better course involves empowering a new, specialized agency to address in practical and timely fashion both the symptoms and the causes of platform-related problems that require remediation. The agency's statutory mandate should take care not to displace the antitrust laws explicitly or by implication. Rather, the agency should be given powers that supplement and complement the Justice Department's and the Federal Trade Commission's competition and consumer protection mandates.

61 Id. at 853. (emphasis supplied)

62 *See*, e.g., Spencer Waller, Areeda, *Epithets, and Essential Facilities,* WISC. L. REV. 359 (2008); Philip J. Weiser, *Goldwasser, the Telecom Act, and Reflections on Antitrust Remedies,* 55 ADMIN. L. REV. 1 (2003); STIGLER ANTITRUST REPORT, *supra* note 12, at 78–80.

Appendix 2: Key Features of the Digital Platform Agency

The behavioral differences between traditional industries with relatively stable technology and new digital businesses with rapidly evolving capabilities demand a new approach to public oversight. Attempts to repurpose existing federal agencies perpetuates old procedures, practices and precedents developed for the realities of a different era. The solution must be more than attempting to clone industrial era regulatory tools to meet digital era needs.

Regulatory Success In A Digital Environment

We too often forget that the mid-19th and early 20th centuries were also times of unprecedented technology-driven change that upended social and economic norms.

Creating a new agency is well in line with how the government has responded to technological advances in the past. The advent of railroads in the mid-19th century brought forth issues of behavioral abuse in a novel, yet vital, industry. In response, the Interstate Commerce Commission (ICC) was created in 1887. In a similar vein, the advent of radio technology quickly triggered a federal role, culminating in the 1934 creation of the FCC.

Digital platforms are the railroads and radio of the 21st century, occupying a similarly important position in modern society. Just as railroads opened up the West, today's search engines and social networks do the same for the Internet, permitting its potential to be more fully realized in terms of improvements in existing services and the creation of entirely new ones.

We too often forget that the mid-19th and early 20th centuries were also times of unprecedented technology-driven change that upended social and economic norms. Policymakers of that era had to step up to balance the power of new technology-based enterprises with the public interest. While we may look back on that era as simpler times, to those involved the changes they were called upon to deal with were as revolutionary, disruptive, and potentially harmful as today's transformations.[63]

The regulatory structures developed to deal with the new realities of the industrial era reflected the characteristics of the dominant companies of the era—characteristics that have been upended by digital technology. Twenty-first century technology and market realities require a new regulatory structure of nimble oversight tools unpossessed by the agencies that still today oversee industrial markets.

In the new times of the digital era, there is a need for new solutions to the oversight of companies with significant market power and societal effect.

Digital Platforms are Different

Digital platforms have grown to dominate key portions of the economy in ways that are significantly different from their industrial predecessors. By galvanizing

the power of network effects, economies of scope and scale, and massive amounts of data previously unachievable due to the inability to collect and exploit it, a few dominant firms rule over online search, social networking, e-commerce and the digital advertising market—activities fueled by the companies' dominant data power.

This possibility was identified by FTC Commissioner Pamela Jones Harbour in her extensive Dissenting Statement in Google's 2007 acquisition of DoubleClick:

> *"[M]arrying the [Google and DoubleClick] datasets raises long-term competition questions that beg further inquiry.*
> - *In a post-merger online advertising market driven by the value of behavioral targeting, will Google/DoubleClick face meaningful competition?*
> - *Will any other firm be able to amass a dataset of the same scope and size?*
> - *Will any other company be able to overcome network effects and offer an equally focused level of behavioral targeting?*
> - *If advertisers and publishers have to channel their online advertising through Google/DoubleClick in order to access the best dataset that supports targeted advertising, will any other firms have the ability or incentive to compete meaningfully in this market?"*[64]

Twenty-first century technology and market realities require a new regulatory structure of nimble oversight tools unpossessed by the agencies that still today oversee industrial markets.

The ability to join advertisers, sellers of products, and content creators with billions of consumers relies on the vast amount of data collected and then hoarded by the companies selling those connections. With such data as the essential digital asset, its control creates a virtually insurmountable hurdle to competition. Neither antitrust nor traditional regulatory tools are capable of moving nimbly or quickly enough, let alone reliably enough, to address immediate impediments to competition and fair dealing that result from the power of dominant digital platforms.

Competing in the digital marketplace requires access to the raw material of data. The dominant digital companies have achieved their position through control over massive amounts of data. Companies seeking to compete against one of the dominant platforms confront the reality that advertisers pay for the demographic granu-

63 For example, Professor, later Chief Judge, Arterburn raised this question as new regulatory possibilities were surfacing in 1927:

> A field of law that is enclosing within itself vast portions of old law, at an unusually rapid rate today, is that which concerns businesses affected with a public interest. The exact direction which this development shall take, accelerated by the immense pressure brought by our industrial structures of this day, is open to wide and interesting speculation. Whether it will eventually include all businesses within its grip, like a giant octopus pressing its unwelcome hold, silently and unconsciously upon one class of business at a time, or whether it shall soon be caught and held within bounds by definite rules soundly worked out, is worth considering. We have the view presented of a bureaucratic government regulating every phase of human activity. Whether our government is progressing or retrogressing at this time, we should know. Are we reverting to the paternalism of the thirteenth century, or the laissez faire policy and extreme individualism of the seventeenth and eighteenth centuries? Or is it a middle course we are steering?

Arterburn, *supra* note 16.

64 In the matter of Google/DoubleClick F.T.C. File No. 071-0170, Dissenting Statement of Commissioner Pamela Jones Harbour, 8 (Dec. 20, 2007), https://www.ftc.gov/sites/default/files/documents/public_statements/statement-matter-google/doubleclick/071220harbour_0.pdf.

larity made possible by massive amounts of data on a massive number of individuals.

When Facebook began in 2004, the leading social media company was Myspace, owned in part by Rupert Murdoch's News Corp. In those days, data aggregation and exploitation had yet to achieve its subsequent dominance. As a result, Facebook was able to displace Myspace through old-fashioned "my product is better" competition. Today, if a new "better than Facebook" product were to come along, the services it could sell to advertisers—and thus its revenue potential—would be sorely limited because of its limited reach as compared to the vast trove of user and related data Facebook has collected and hoarded. As Professor Fiona Scott Morton and antitrust attorney David Dinielli pointed out in a recent paper:

> *Facebook harvests vast stores of data based on users' interactions with its own platform as well as users' activities off Facebook that Facebook tracks such as location and purchases. Assuming that a new entrant would also be ad supported, no de novo entrant would have access to anywhere near the volume or quality of data that Facebook can access until it reaches the same level of scale (which is difficult because of network effects etc.) and privacy intrusiveness.*[65]

Neither antitrust nor traditional regulatory tools are capable of moving nimbly or quickly enough, let alone reliably enough, to address immediate impediments to competition and fair dealing that result from the power of dominant digital platforms.

What is needed is an agency that can quickly adopt and enforce broad-based rules, then apply them both ex post and ex ante to quickly spot and rectify harmful digital market practices. Remedies ranging from access to data, to nondiscriminatory algorithms, to open network interfaces, to interoperability require first, a statute applying common law-derived principles to the digital market, and second a substantial level of technical expertise. The goal of such oversight should be the development and application of accepted industry standards to build workable public interest guardrails against abuse. No existing agency has this skill or agility today.

Digital Oversight Must be Different

Agencies such as the Federal Trade Commission (FTC) have been suggested for this oversight. That the FTC is populated by dedicated professionals, there is no doubt. Similarly, there can be no doubt that Congress has for many years constrained the agency's appropriation and jurisdiction when the FTC tried to be proactive.[66] Given its broad responsibilities over an expansive collection of traditional marketplace activities, including its continuing enforcement of antitrust law, the FTC's resources are already spread thin. The new economy requires a "digital-all-the-time" agency, not the sharing of resources between the industrial and digital economies. This focused oversight necessitates not only a specialized form of regulation, but also a new approach to the development of such policies as outlined in Appendix Three.

65 FIONA SCOTT MORTON & DAVID DINIELLI, ROADMAP FOR AN ANTITRUST CASE AGAINST FACEBOOK, 18, Omidyar Network (Jun. 2020), https://www.omidyar.com/sites/default/files/Roadmap%20for%20an%20Antitrust%20Case%20Against%20Facebook.pdf.

66 *See* Harold Feld, *How Not To Train Your Agency, Or Why The FTC Is Toothless.,* TALES OF THE SAUSAGE FACTORY (Mar. 15, 2019), https://wetmachine.com/tales-of-the-sausage-factory/how-not-to-train-your-agency-or-why-the-ftc-is-toothless/. Feld argues that the FTC was punished for its enforcement through the cabining of its authority in the FTC Improvement Act of 1994.

Such a new agency would augment, not replace, the agencies responsible for enforcing antitrust law. The job of the Digital Platform Agency (DPA) would be the protection of both consumers and competition through the application of nimble regulatory tools and speedy dispute resolution consistent with the dynamic nature of digital markets. Because antitrust law does not impose the traditional common law duty of care and only sparingly adopts the duty to deal that many federal agencies apply to other commercial sectors, Congress must empower a new agency to do so for digital firms.

Because antitrust law does not impose the traditional common law duty of care and only sparingly adopts the duty to deal that many federal agencies apply to other commercial sectors, Congress must empower a new agency to do so for digital firms.

Such digital oversight should be different from traditional industrial oversight in two ways. First, the responsibility of the new agency should be to make judgment calls about ever-changing marketplace activities based upon congressionally determined behavioral principles. Second, in exercising such responsibility the new agency will utilize behavioral codes developed by an industry/public expert group whose actions are supervised and approved by the agency.

Scholars with extensive backgrounds in both antitrust and regulation have suggested the need for a similar approach to digital market accountability. In a recent article, Professors Howard Shelanski and Bill Rogerson first identify the weaknesses of antitrust for addressing digital platform concerns and then suggest an approach like the DPA:

> *We nonetheless find three main reasons why, despite the challenges in getting regulation right, limited regulation might have advantages over traditional antitrust adjudication in the context of large-scale industries with network effects. First, . . . the adjudicative model for antitrust enforcement and doctrinal development has met with well-founded criticism. . . Second, traditional antitrust remedies might not effectively address the competitive challenges of digital platform markets. . . Third, . . . conduct that courts ordinarily judge under antitrust law's general rule of reason might have different presumptive effects and therefore be better governed by a more specific set of standards in digital platform industries. An expert agency might be particularly suited to determine when 'outer-boundary' theories of harm that courts rightly disfavor for general applications—theories of harm like predation, refusals-to-deal, or acquisition of nascent competitors—should apply in specific contexts.*[67]

Shelanski and Rogerson go on to identify specific telecommunications rules as successful forms of regulation pertinent to digital platforms: "Regulations designed to increase competition by reducing switching costs have had notable success in the telecommunications industry. In particular, in 2003 the FCC introduced regulations that allowed mobile telephone subscribers to take their telephone number with them when they switched mobile telephone providers, thereby significantly reducing the costs of switching providers. This is widely thought to have increased levels of competition in this mobile telephony."[68] They then conclude:

> *traditional antitrust adjudication is unlikely to remedy the problems of platform markets, or to do so in a blunt way that does not apply technical expertise to ensure that remedies are effective and beneficial. In this article, we identify forms of regu-*

67 William P. Rogerson & Howard Shelanski, *Antitrust Enforcement, Regulation and Digital Platforms,* 6–7 (Apr. 18, 2020) (unpublished manuscript, on file with author) (forthcoming in U. PA. L. REV.)

lation we think could, in the specific context of dominant digital platforms, improve on the adjudicative model of antitrust enforcement while avoiding the most significant costs and burdens of traditional public utility regulation. Through limited and non-discriminatory access and interconnection, digital platforms could continue to innovate, compete, and provide network benefits to their users while at the same time ensuring that actual and potential competitors can enter, gain traction, and expand their appeal to consumers.[69]

It falls to Congress to fully embrace the reality of the digital era with the first designed-for-digital federal agency.

The U.K.'s expert antitrust agency, the Competition & Market Authority (CMA) has come to a similar conclusion regarding oversight of digital platforms. In its recent Market Study on the digital advertising market, the CMA concluded that "there is an urgent need to develop a new pro-competition regulatory regime for online platforms." The CMA proposes a "regulatory regime with strong ex ante rules which can be enforced rapidly and updated as required." This includes "A binding code of conduct with strong powers to sanction non-compliance."[70] The CMA goes on to say:

- "The code would govern the behavior of online platforms with strategic market status. This would include both Google and Facebook.
- The code would be structured around the high-level objectives of: 'fair trading'; "'open choices'; and 'trust and transparency'.
- A Digital Markets Unit (DMA) would be empowered to enforce the code, penalizing firms for non-compliance where appropriate and developing the code over time, ensuring concerns can be dealt with swiftly.

The DMA should also have powers to introduce 'pro-competitive interventions' to tackle sources of market power and increase competition, including powers to provide access to data, to support consumer choice and to order the structural or functional separation of platforms where necessary."[71]

Statutory Underpinnings

It falls to Congress to fully embrace the reality of the digital era with the first designed-for-digital federal agency. There are three core concepts such legislation must address:

- Oversight of digital platform market activity on the basis of risk management rather than micromanagement; this means targeted remedies focused on market outcomes and thereby avoids rigid utility-style regulation,
- Reaffirmation of common law principles of a duty of care and a duty to deal as the underpinning of DPA authority, and
- Delivery of these results via an agency that works with the platform companies to develop enforceable behavioral codes while retaining the authority to act independently should that become necessary.

68 *Id.* at 48.
69 *Id.* at 64.
70 *CMA Final Report, supra* note 14.
71 *Id.* at 322.

What follows describes the underlying concepts of the statutory framework needed to meet the digital market challenge, as well as examples of where and why the new agency should be involved.

Risk Management, not Utility Regulation: rather than monitor costs, prices, or prohibit specific behaviors as was a common practice for industrial era regulation, the digital marketplace requires a more flexible set of standards informed by common law-derived norms that demand specific market outcomes. A new agency must manage risk to prioritize competitive market outcomes and consumer protection as precisely as possible to preclude or ameliorate risky behavior most harmful to competition and consumers. For the DPA this means that the process of risk management requires a focus on market outcomes instead of utility-style regulatory mandates.

In the absence of federal policy, the dominant digital companies have assumed the role of a pseudo-government to make the rules for the digital marketplace.

Statutory Directive – Restoring Common Law Principles to Digital Activities

In the absence of federal policy, the dominant digital companies have assumed the role of a pseudo-government to make the rules for the digital marketplace. In the process, basic concepts that have been redefined and applied to economic activity for centuries have been conveniently ignored. The authorizing legislation for the new digital agency should be based around the agency's application of such common law concepts to digital activities.

The duty of care establishes that it is the responsibility of a purveyor of goods or services to anticipate and mitigate the harmful effects that might result from those activities. The contemporary concepts of negligence, for instance, are derivative of the duty of care, as it has evolved over the centuries. When the railroad spread and amplified the industrial revolution, for instance, application of the duty of care principle determined that the railroad companies had a legal duty to anticipate and mitigate that the hot cinders spewing from smokestacks could set fire to the barns and hayricks their locomotives passed. Similarly, from the time of the earliest automobiles, courts imposed a duty of care on car manufacturers even for faulty parts although the parts were made by a third party. As the dominant digital companies drive the information revolution, they, too, have a responsibility for curbing the negative consequences of their actions. This includes prudent handling practices and treatment of consumer and commercial data.

The duty to deal is another common law-derived concept that must find root in the digital economy. When a service is essential or critical owing especially to its monopoly characteristics, there is a duty to provide non-discriminatory access to that service.[72] The Pacific Telegraph Act of 1860 established such a policy for the essential information service of that era by mandating non-discriminatory access. The internet is the essential service of this era and those companies that collect and store its critical asset—data—should have a commensurate duty to deal, to not monopolize that asset. This should include, for instance, nondiscriminatory access through interoperable interfaces, free flow of data across services providers, and limits on preferencing dominant platforms over competitors.

The Agency should be directed to promote competition and protect consumers with a specific set of tools built around the duty of care and duty to deal. Such

oversight would extend across all digital platform activities including social media and e-commerce, but (as discussed below) applied in a manner so as to avoid unnecessarily burdening smaller companies. This is not to interfere with the jurisdiction of existing federal agencies (e.g., oversight of an e-commerce company's prohibition of tainted goods or false advertising).

The Agency should be directed to promote competition and protect consumers with a specific set of tools built around the duty of care and duty to deal.

Who is Subject to These Duties?

The Agency's tools related to establishing the duty of care must be targeted towards critical values not otherwise protected such as privacy and the security of personal information, and the duty to deal should be limited to platforms deemed systemically important to society due to their economic dominance or essential nature.

The Agency will need to determine what companies are systemically important in their social and economic impact. This is not a new role for government. The Dodd-Frank Act, which focused on preventing financial collapse, described systemically important as involving companies that "need not be massive," but are "essential to the workings of the financial system." The key feature the Act highlights is that systemically important companies' "failure would trigger a cascade effect that could cripple the entire system they inhabit."[73] The DPA should develop criteria for digital market companies that reflect this same degree of importance to the workings of digital markets, as Dodd-Frank did for the financial system.

An Example of Systemically Important Power: Bottleneck Power

The Agency should also determine which companies are systemically important as a result of their dominance or bottleneck power. For example, the DPA must assess whether network effects, economies of scale, economies of scope, power over data and similar factors have given certain companies excessive economic or social power, most often reflected by having a dominant position—bottleneck or gatekeeper control—over a key aspect of the digital market.

The Stigler Report defines bottleneck power this way:

> *"Bottleneck power" describes a situation where consumers primarily single-home*

72 As noted, this legal proposition originated many centuries ago and has been deployed continuously as economic circumstances have dictated. *See* Arterburn, *supra* note 16, at 420–21 (citations omitted):

> Businesses, it is true, had certain peculiar duties placed upon them, such as the duty to serve all who applied; but this was because of the peculiar economic conditions of the time, it is believed. The reason for these duties being placed upon a business, was not because it was "public" but because it was more important to the public at the particular time. All trades in time of distress or economic paralysis were affected with a very high degree of public interest. The duty to serve, and not the duty to use care, in such times, was the distinguishing feature of the public interest of the trade or business. Those upon whom the duty to serve is placed may vary with economic conditions, but not those upon whom the duty to use care is placed.

73 Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 929-Z, 124 Stat. 1376.

and rely upon a single service provider (a "bottleneck"), which makes obtaining access to those consumers for the relevant activity by other service providers prohibitively costly.[74]

Similarly, the Furman Report defines gatekeeper power:

[O]ne, or in some cases two firms in certain digital markets have a high degree of control and influence over the relationship between buyers and sellers, or over access by advertisers to potential buyers. As these markets are frequently important routes to market, or gateways for other firms, such bottlenecks are then able to act as a gatekeeper between businesses and their prospective customers.[75]

The consumer protection and competition promotion functions of the DPA are designed to enhance and not replace what other existing Federal agencies do.

Firms may benefit from bottleneck or gatekeeper power due to economic forces that impede entry and foreclose large swaths of the market from competition. Both the Stigler and Furman Reports note the significant impact that high consumer switching costs can have on the operation of a competitive market. Psychologists and economists have studied how the inertia of default choices[76] pushes users towards single-homing—i.e., locking into a single platform in pursuit of convenience. But it is not just convenience that locks consumers to a provider. Often the product itself is designed with technological barriers to switching precisely for the purpose of preventing consumer choice. Similarly, it is sometimes argued that it is "technically necessary" to have tying between two products. Such practices should be remitted to specialists if it involves significant social consequence. Digital businesses that have this incentive and ability to develop and preserve a single-homing environment should be a specific focus of the DPA because of their bottleneck or gatekeeper power.

Relationship to Other Agencies and Laws

The consumer protection and competition promotion functions of the DPA are designed to enhance and not replace what other existing Federal agencies do regarding digital technology in their jurisdiction. Federal agencies as diverse at the National Highway Traffic Administration (NHTSA) and Food and Drug Administration (FDA) deal with the impact of digital technologies in their areas of focus. Nothing in the authorizing statute for the DPA should in any way limit or affect existing federal statutes. Most importantly, the DPA should not duplicate the activities of the principal antitrust agencies but instead complement those activities.

The Agency should be expected to provide the federal antitrust agencies with advice regarding transactions involving systemically significant firms and provide advice regarding any antitrust investigations or prosecutions whenever the antitrust agencies seek such input. Similarly, the DPA should be expected to provide advice to the FTC's investigations or prosecutions of digital platforms pursuant to the FTC's deceptiveness and unfairness jurisdiction. Finally, the Agency would

74 STIGLER ANTITRUST REPORT, *supra* note 12, at 84.

75 FURMAN UK REPORT, *supra* note 22, at 41.

76 *See*, e.g., DANIEL KAHNEMAN, THINKING FAST AND SLOW, Farrar, Straus and Giroux (2011); RICHARD THALER AND CASS SUNSTEIN, NUDGE, Yale University Press (2008).; and MICHAEL LEWIS, THE UNDOING PROJECT, W.W. Norton (2016).

act as the monitor of systematically important firms subject to judicial decrees involving such firms.

Examples Of Agency Interventions

Interoperability

Interoperability is the heart and soul of the internet.

Interoperability is the heart and soul of the internet. Originally called "internetworking," the internet is nothing more than a standard way to interconnect disparate networks. That the platform companies take advantage of such interconnection to deliver their products but then deny interconnection to their service is a perversion of the internet itself and an affront to the public interest.

Factors that encourage reliance on one provider, referred to as single-homing, may be inherent to the economics and technology, or they may be policy decisions made by the incumbent platform. A recent analysis summarized much of the accumulated learning on the subject. "[E]ntities with disproportionately large amounts of information have relatively little to gain and much to lose from sharing the information that they collect. Indeed, by refusing to share information data with their smaller rivals, large entities may be able to eliminate these rivals as competitors and instead turn them into customers."[77] Thus, a dominant platform's policy not to provide interoperability between its services and those of competitors should be viewed skeptically. Such corporate decisions are reflected, for instance, in technical standards and contracts, including methods for denying critical market data to users and competitors. Competitors may find their own way to provide interoperability without permission, sometimes called "adversarial interoperability," and incumbents may affirmatively choose to block this when they discover it.

In a world where, for instance, access to a social network's user base can make or break a small company's picture sharing or messaging service, it is critical to separate reasonable security or privacy interconnection specifications from unfair impediments to competition. The same is true for connecting advertisers and content providers through real-time bidding and lightning-speed auctions on digital advertising exchanges.

Government oversight of interconnection responsibilities is not new. Even before the internet, the FCC struggled for decades with interconnection between large and small telephone companies, between long distance and local telephone companies, or between telephone common carriers and private network service providers.

As Dr. Stanley Besen noted:

> *It is useful to begin the discussion of compulsory data sharing by exploring an analogous situation drawn from another context: carrier interconnection in the telecommunications industry. As [Professor Eli] Noam has noted:*
>
> > *The historic experience with interconnection around the world shows that interconnection is not made available freely by an incumbent to its competitors. Nor is the claim to interconnection as a right given up voluntarily by new entrants once competition emerges.... Often, the terms of interconnection are left nominally or*

77 Stanley M. Besen, *Competition, Privacy, and Big Data,* 28 Cath. U. J. L. & TECH 63, 70 (2020) (citations omitted).

> *initially to the parties' negotiation. Yet regulatory intervention is frequent where there is an asymmetry in bargaining strength and in the urgency for interconnection, which is usually the case. Even where formal regulatory intervention does not take place, the negotiations are shaped by the expectations of what the regulator's decisions would be. Those decisions, in turn, depend on fundamental policy priorities. As a matter of empirical fact, interconnection is regulated everywhere where competitive telecommunications exist.*

Government oversight of interconnection responsibilities is not new.

The point here is that, just as interconnecting with their smaller competitors is likely to erode the competitive advantage of large telecommunications carriers, so that those carriers are unlikely to be willing to interconnect unless compelled to do so by regulators, firms with large amounts of data are also likely to be unwilling to share their data with their smaller competitors. … [As] Professors [Daniel] Rubinfeld and [Michal] Gal argue that "[i]f the source of the barriers [to data sharing] is inherently structural, and sharing the data is socially beneficial, a regulatory solution may be appropriate, perhaps by requirements that the data be made widely available at a reasonable and non-discriminatory cost….

> *As the experience in mandating interconnection in telecommunications makes clear, mandating data sharing is unlikely to be straightforward. Although the necessary cooperation among telecommunications firms is limited to completing calls that originate on the networks of other operators, disputes can nevertheless arise regarding, among other things: (1) the locations at which interconnection takes place; (2) the quality of interconnection; and (3) the prices charged for interconnection. The necessary conditions for the efficient sharing of data are likely to be at least as complex. Which data would be shared, at what frequency, and at what level of aggregation, as well as the technical standards through which data sharing would take place and the prices, if any, that would be charged by the initial collectors, are among the issues that would have to be addressed in any mandatory data sharing regime."*[78]

Matters of digital platform interconnection require a specialized expert agency since the platforms are beyond the scope of the FCC and the FTC's jurisdiction is constrained.

Meaningful interoperability in digital markets often requires access to specific data that enables those who rely upon a platform to reach their customers, place advertisements on specific websites or adjacent to targeted content, or just connect buyers and sellers. As Professor Fiona Scott Morton and David Dinielli point out, dominant display advertising platform assets controlled by Google can be used to deny access to the data necessary for a competitive market to function:

> *But without the ability to know who a consumer is and the ability to measure their action that third-party cookies had allowed, advertisers as well as rivals in the ad tech stack will not be able to bid efficiently. Nor will they be able to deliver payment to effective ads (attribution) based on consumer clicks or actions. They will be competing as if they are blind, against a competitor with 20/20 vision.*[79]

Scott Morton and Dinielli discovered a similar problem with how Facebook can control access to data in manners that impede competition:

78 *Id.*, at 77–78, 79 (citations omitted).

> *Facebook controls, in addition to its vast stores of user data, all information related to ads placed on its inventory, including click-through rates and the like. Advertisers, despite purchasing ads on Facebook, cannot get Facebook to give them these data, even though Facebook does provide log-level data about ads placed on other properties. This makes it difficult for advertisers to evaluate the actual value of what they are buying. An ad served on a page opened by a bot, for example, does the advertiser no good, nor does an ad at the bottom of a page this is never viewed by the user, or an ad that runs too fast for the human eye to see. But the advertiser does not know how frequently that happens because Facebook refused to share data that permits truly independent third-party audits. This practice is only possible due to Facebook's market power.*[80]

Matters of digital platform interconnection require a specialized expert agency since the platforms are beyond the scope of the FCC and the FTC's jurisdiction is constrained.

Interoperability requires both cooperation between and among actually or potentially competitive enterprises and informed consumers. Thus, the DPA must use tools known to expand competitive opportunities through standards for data disclosure, transfer, and portability as well as guidance about the distribution of costs among commercial entities that interoperability will invoke. In addition, these standards should enable informed choice and require transparent disclosures of what data are gathered and how they are used. This includes user control over the transfer of personal information and information involving interactions with others, often described as the "social graph." Transparent disclosures and portability would reduce the cost of switching from platform to platform, reducing impediments to platform competition.

Portability of data also requires technical platform adjustments to ensure that data handoffs work effectively in real-time and with appropriate privacy and security protections. In order to transfer data in a safe an efficient manner, platforms must develop common application programming interfaces (APIs) to manage the process.

The value of data interoperability and portability was demonstrated by one of the most important pro-competitive telecommunications regulations: the FCC's "number portability" rules. Without the ability for consumers to take their phone number to a new carrier if they wanted to switch, telecommunications competition would have been dramatically hampered. The original FCC rule required substantial reengineering of networks and databases to enable a quick handoff between carriers competing to sign up customers. The digital market equivalent would open access to data as well as give consumers the power to port their data from platform to platform could enable innovations that challenge the largest digital market players.

Self-Preferencing Practices

Dominant platforms may condition access to their most essential or critical services through contract or business arrangements. This tends to reinforce the dominant

79 FIONA SCOTT MORTON & DAVID DINIELLI, ROADMAP FOR A DIGITAL ADVERTISING MONOPOLIZATION CASE AGAINST GOOGLE, Omidyar Network (May 2020), https://www.omidyar.com/sites/default/files/Roadmap%20for%20a%20Case%20Against%20Google.pdf.

80 SCOTT MORTON & DINIELLI, *supra* note 65, at 34.

firm's existing advantages in scale, scope and data dominance over competitors and potential market entrants. The most problematic limitations include exclusive distribution agreements, prohibitions on offering price discounts to competitors, and price or service inducements that favor the dominant platform.

For example, a platform may have used its bottleneck power to negotiate a contract with business customers (app developers on an app store, or retailers on an e-commerce platform) that conditions access to transaction data. The Stigler Report examines how this type of condition could have anticompetitive effects.[81] If the dominant platform also competes against those business customers on its own platform (e.g., selling apps on its own app store, or being a retailer on its own e-commerce marketplace) there's likely an incentive to use the retailer's data to benefit the platform's own plans. "That data advantage over rivals can enable a company to achieve and/or maintain critical economies of scale, better predict consumer behavior, and form a powerful barrier to entry for potential competitors."[82] The platform could use that data to learn which products are selling well and enter the market niche of the business customer, either through acquisition or new product development. It could use data to learn about the customer's strategies and how effective they are, either copying them or avoiding them as the data indicates. It could use that data to identify customers and to compete directly, thereby disadvantaging competitors' ability to target and expand their customer base. The European Union has investigated Amazon for precisely such practices.[83]

The value of data interoperability and portability was demonstrated by one of the most important pro-competitive telecommunications regulations: the FCC's "number portability" rules.

A similar effect occurs when a platform company requires installation of a bundle of affiliated products on the platform in order to block the growth of rivals. A platform with its own operating system, for instance, might bundle a set of its own apps because those are the apps which face real or potential competition. When a dominant firm is setting up these bundles, an antitrust case may be ineffective in protecting competition due to the complexity of the problem—e.g., "which apps do consumers really prefer?"—and the slow pace of litigation, as the Microsoft experience evinces. For an existing regulatory agency, the nature of these dangers may not be new, yet the complexity of separating legitimate technical digital business decisions from competitively harmful practices requires the constant focus and vigilance of a specialized agency.

Self-preferencing could have significant impacts throughout the economy in the context of e-commerce or the "Internet of Things." Consumers must be able to change their defaults, make choices, and connect to unaffiliated products and services in a practical way. Only by weighing the pros and cons of what it takes to synchronize competition, innovation, security and consumer convenience on a day-to-day basis will it be possible to govern digital platforms appropriately.

Data Practices

The commercial advantages and potential abuse of consumer privacy that flow

81 STIGLER ANTITRUST REPORT, *supra* note 12, at 94.

82 *Id.* at 95.

83 Adam Satariano, *Amazon Set to Face Antitrust Charges in European Union,* N.Y. TIMES (Jun. 11, 2020), https://www.nytimes.com/2020/06/11/technology/amazon-antitrust-european-union.html.

from massive aggregation and control of data by digital platforms of all sizes must be addressed with a cohesive public oversight structure. Consumers today suffer from both a lack of control over how their data are used and an inability to take their data from platform to platform. At one extreme, efforts to protect privacy by simply locking data within the vaults of a dominant platform harm legitimate business opportunities for competitors as well as socially useful research activities. At the other extreme, efforts to allow data to flow openly across markets might compromise data security and privacy. A new agency would be well positioned to balance privacy and competition.

Only by weighing the pros and cons of what it takes to synchronize competition, innovation, security and consumer convenience on a day-to-day basis will it be possible to govern digital platforms appropriately.

The activities of the DPA should be supportive of whatever Congress decides on privacy policy. Such ongoing legislative activity is focused on establishing the privacy rights of citizens. This paper does not address those issues, but rather the marketplace effects of the use of personal data.

Such marketplace effects include a duty to design digital products in a manner that identifies privacy and security impacts and then mitigates their harms. The Agency must also enable individuals to securely transfer their data from one company to another and delete it from the original company's servers. Companies should also be required to hold an individual's data in trust, instituting protections necessary to assume that the trust is not violated by unauthorized access to the information.

Appendix 3: A New Approach to Regulation

A new agile approach to regulatory oversight is required to deal with the fast-paced nature of digital technology and its marketplace impact. In broad terms, such an approach should be built around the common law-derived principles of duty of care and duty to deal and oriented towards risk management rather than micromanagement. To accomplish this, the Digital Platform Agency should identify risks to consumers and competition and respond through the initiation and approval of cooperatively development and enforceable behavioral codes, accompanied by enforcement authority. Where such cooperative activity does not produce results acceptable to the DPA, the agency will act on its own.

Top-down, rules-based management—for both companies and governments—was possible because the pace of change was slower than today.

Moving from Industrial Era-Style Oversight

As Appendix Two makes clear, the regulatory agencies of the federal government were created in response to the effects of the industrial economy. In so doing, the structure and management of these agencies adopted the prevailing practices of the industrial era. Thus, at a time when industrial management was a top-down, rules-based bureaucracy, the agencies created to oversee industrial activity adopted a similar approach.

Such top-down, rules-based management—for both companies and governments—was possible because the pace of change was slower than today. The pattern of new technology adoption historically experienced a "diffusion lag" with adoption coming long after invention.[84] Stanford professor Paul David illustrated this phenomenon in a study of the impact of electrification on industrial production.[85] He noted, for instance, that factories didn't reach 50% electrification until four decades after the first central power station opened. Such a slow-paced adoption of new technology was reflected within corporate management structures, as well as in the government's oversight of that management. When developments progressed slowly, such oversight, whether by management or by government, was sufficient.

84 Diego Comin and Bart Hobijn, *An Exploration of Technology Diffusion,* AM. ECON. REV. 100 (Dec. 2010), 2031–2059, https://www.dartmouth.edu/~dcomin/files/exploration_technology.pdf.

85 Paul David, *The Dynamo and the Computer: An Historical Perspective On the Modern Productivity Paradox,* AM. ECON. REV. 80 (1990), 355–61, https://www.researchgate.net/publication/4724731_The_Dynamo_and_the_Computer_An_Historical_Perspective_On_the_Modern_Productivity_Paradox

The current pace of technology innovation and adoption is far from slow-paced. As a result, digital era companies have abandoned rigid, rules-based bureaucratic management. The diffusion lag has been replaced with "blitzscaling" which emphasizes large magnitude increases in development, delivery, and adoption in a short amount of time.[86]

In place of rigid management practices, digital companies follow agile practices that allow them to constantly react and evolve in the face of new developments. The classic example of such agility is the frequent updating of software for devices and applications. Every time Apple updates the iPhone software, Microsoft updates Windows, or the Weather Channel updates its smartphone application, agile software management is being practiced. If the DPA is to keep abreast of this rapid pace of change, it, too, must become agile in its applications of the statute.

This is a process designed to produce mandatory behavioral standards that are more measurably effective than blindly trusting the market and best practices, yet because of the companies' involvement, more agile.

Such agility should be based around combining the public participation underpinnings of the current regulatory process with a new model based on supervised but cooperative industry-public development of enforceable behavioral codes. The new process is one of cooperative engagement in order to create policies that are more dynamic than traditional regulation. Make no mistake, however, this is a process designed to produce mandatory behavioral standards that are more measurably effective than blindly trusting the market and best practices, yet because of the companies' involvement, more agile.

From Micromanagement to Risk Mitigation

The adverse effects of the amazing products and services produced by digital platform companies have- too often been accompanied by a lack of consideration of the impact on the public interest, let alone any attempt to mitigate those adverse effects. The wholesale siphoning of personal information proceeded without consideration of its broader impact on the privacy rights of individuals. The subsequent hoarding of that data proceeded without consideration of mitigating its impact on other marketplace and media participants, and thus on competitive dynamism. Similarly, lax security has too often permitted the exfiltration of personal information.

Of course, it is possible to paint a picture where the platform companies ignored the consequences of their actions by *design.*[87] The rewards of such behavior are great; what economists describe as monopoly rent: high prices and high profits. Whether the consequences were intentional or accidental, however, the results are the same: adverse consequences for consumers and competition. Such results demand mitigating solutions.

86 REID HOFFMAN, BLITZSCALING: THE LIGHTNING-FAST PATH TO BUILDING MASSIVELY VALUABLE COMPANIES, Penguin Random House (2018).

87 The disinclination of large firms to cooperate with smaller rivals has been extensively studied. See, e.g., Stanley M. Besen & Joseph Farrell, *Choosing How to Compete: Strategies and Tactics in Standardization,* 8 J. ECON. PERSPECT. 117, 126–29 (1994); CARL SHAPIRO & HAL R. VARIAN, INFORMATION RULES: A STRATEGIC GUIDE TO THE NETWORK ECONOMY, 197 Harvard Business School Press (1999); Daniel L. Rubinfeld & Michal S. Gal, *Access Barriers to Big Data,* 59 ARIZ. L. REV. 339, 367 (2017).

Earlier efforts at regulating the effects of new technologies often evolved into so-called "utility regulation" where the behavior of companies was precisely regulated in an effort to mitigate adverse effects. Such micromanagement was possible when new developments were slower paced and experiencing the diffusion lag.

The fast pace of the digital era requires a creative new approach to regulatory oversight. Old style regulation can be counterproductive if it prioritizes dictating detailed procedures over boundary-expanding innovation. Yet—and this is the key rationale for the DPA—the broad definition of consumer welfare, and market competition cannot be allowed to become continuing casualties in a digital economy.

The fast pace of the digital era requires a creative new approach to regulatory oversight.

The common law-derived principles of duty of care and duty to deal form the foundation of the DPA's substantive mandate. These concepts have provided the starting point for the derivation of American laws and regulations applicable to particular industries throughout the country's history. Enacting the principles into law will supply a reliable basis for the development of obligations applicable to systemically important digital platforms, even as technology and market activities evolve.

Consistent with the underlying agile risk management approach recommended here, the objective of Congress should be to make the obligations as general and flexible as circumstances permit. The dynamic nature of the digital enterprises calls for a lighter regulatory touch based on identifying and mitigating significant risks rather than directing specific operational behaviors.

The operation of the DPA is designed to attack and mitigate adverse effects without the necessity to micromanage the processes leading to those effects. Such risk management is accomplished through identification of the risk, the design of actions to mitigate that risk through a cooperative public-private Code Council – all overseen, ultimately approved by, and enforced by the DPA.

The DPA, thus, is responsive to the arguments of the digital companies that regulatory intrusion to dictate corporate management practices can negatively impact innovation. At the same time, the DPA's adherence to and enforcement of a duty of care and duty to deal principles provides the focused public interest protections that currently are absent.

General Operations of the DPA

The DPA should have many of the common characteristics of traditional regulatory agencies. For instance, a multi-member commission in structure with a staff of subject matter experts that adheres to the Administrative Procedure Act (APA). The agency will need experts in engineering, computer science, application development, economics, as well as the law relative to these fields. The selection of commissioners should pay particular attention to appointing individuals with not just subject matter expertise, but also management experience and independent decision-making.

What sets the DPA apart from traditional agencies is twofold: (1) its combination of agile regulatory operations with the kind of public participation required in the APA, and (2) its focus on concerns that flow from network effects, the power of data collection and exploitation, and the winner-take-all nature of digital platforms.

Stated differently, the DPA embraces a variant of the familiar industry standards development process while retaining traditional rulemaking and enforcement regulatory tools should the standards process prove insufficient. Within the digital ecosystem, such a standards-setting process is widely practiced to good effect. That is not to say that the process is untroubled as corporate self-interest can lead to material disputes.[88] But the ultimate success of the standards development process in terms of industry progressiveness and material advancement is beyond dispute.

the DPA embraces a variant of the familiar industry standards development process while retaining traditional rulemaking and enforcement regulatory tools should the standards process prove insufficient.

The DPA's hybrid private-public process is designed to result in cooperatively developed standards subject to government enforcement. As a backstop (as well as an incentive), if the cooperative process is not successful, an alternative process enables the DPA to promulgate standards on its own. In both cases, due process obligations are respected, but within deadlines appropriate to the dynamic nature of digital technology and the services it enables.

In a genuine sense, then, this is not new. As the following discussion indicates, our country, and others, have relied upon informed industry experts to develop practical solutions to challenges and opportunities arising out of their industries, and continue to do so today. In many circumstances, because of the manifest public importance of the resulting standards, many have been made mandatory. Yet, the manifest advantages of producing to a standard have also led to widespread acceptance without any requirement to bring forward the government's coercive power. In the case of systemically important platforms, by virtue of their market power or their essentiality to society or both, it is necessary to impose safeguards on both the process of deriving certain standards and on their faithful implementation.

The argument digital companies have traditionally used against oversight is that the rigidity of old-style regulation stifles the "permissionless innovation" that has characterized digital technology. When efforts are made to avoid such consequences through the articulation of broad behavioral standards, the companies complain about "regulatory uncertainty." Opposition to both rigid as well as flexible regulation, of course, results in no regulation at all.

The DPA overcomes those concerns and the current absence of behavioral policies by appropriating practices long utilized by the commercial sector: industry codes. In response to rapidly changing technology, the DPA's process creates an operational structure in which enforceable regulatory codes can evolve with technology. In place of top-down government dictates of corporate activities, the DPA involves the companies as well as other credentialed experts directly in the Code development process. Should the Code process fail, however, the agency itself retains authority to decide an issue.

Precedents in the U.S. (Non-Governmental)

In 1895 representatives of the manufacturers of fire suppression sprinklers and insurance companies met in Boston to resolve the inconsistencies among sprinkler

88 To take a particularly contentious example, see FTC v. Qualcomm, Inc., 411 F.Supp.3d 658 (N.C. Cal. 2019), app. docketed and stay granted, 935 F.3d 752 (9th Cir. 2019).

and piping installations.[89] The result was a common code and the creation of the National Fire Protection Association (NFPA).[90] Today there are over 275 NFPA codes and standards ranging from fire codes, to the National Electric Code, to the standards for safety matches. The NFPA is an example of a self-regulatory organization (SRO) that operates with the endorsement of the government, and often through enforcement by government.

In response to rapidly changing technology, the DPA's process creates an operational structure in which enforceable regulatory codes can evolve with technology

Activities dealing with public health and safety have been in the forefront of such SRO-government alliances. The American Society of Civil Engineers, for instance, has codes for over 60 different activities, ranging from minimum building design loads, to flood resistance, to standards for people movers. These codes, in turn, have become the standards for government requirements and inspections.[91]

Technology-based businesses are similarly governed by collectively developed standards, but without the governmental enforcement aspect. The internet itself is made possible by a set of standards that allow otherwise incompatible networks to work as one. Smart home technology companies that use the internet are developing standards to assure device compatibility.[92] Telecommunications networks have for a long time relied on cooperatively developed common standards; everything from plug-in jacks to the new 5G networks are based on industry-wide agreement.

Industries have also used codes and standards to respond to issues raised by public policymakers. One of the authors of this paper was involved in establishing the Consumer Code for Wireless Service to govern the consumer-facing issues confronted by the mobile phone industry.[93] The purpose of that Code was to demonstrate industry self-oversight as an alternative to regulation. Years later, in his role as a regulator, the author encouraged the industry to amend the Code to address a specific consumer protection issue, and the industry reacted responsibly. Both experiences were informative of the recommendation in this paper. [94]

These are the proof of the concept for the DPA. Industry expertise, if encouraged to address a public policy problem, has proven capable of producing satisfactory results. Underpinning such codes, of course, is the realization that something beyond goodwill is essential to such an undertaking's success.

A great advantage of such industry codes is their flexibility to reflect operational and technical realities in a timely manner. Typically, the industry uses a structure such as a code council to develop the standards based upon prevailing technological capabilities and other practical issues. The codes also offer the ongoing opportunity for industry or other input to trigger updating to reflect new developments.

89 *History of the standards development process,* National Fire Protection Association (n.d.), https://nfpa.org/codes-and-standards/standards-development-process/how-the-process-works/history-of-standards-development.

90 *All codes & standards,* National Fire Protection Association (n.d.), https://www.nfpa.org/Codes-and-Standards.

91 *Codes & Standards,* American Society of Civil Engineers (n.d.), https://www.asce.org/Codes-and-Standards/Codes-and-Standards/.

92 Zachary Comeau, *Big Tech Is Developing Standards For Smart Homes,* MY TECH DECISIONS (Dec. 20, 2019), https://mytechdecisions.com/facility/big-tech-is-developing-standards-for-smart-homes/.

93 *Id.*

94 The issue was the unlocking of mobile devices, once paid for, to permit usage on a competitive network.

A challenging part of creating and managing a voluntary industry code is that it is only as strong as the industry's weakest link. The innumerable hours of interindustry negotiations necessary to develop the Wireless Code, for instance, demonstrated that the search for the necessary industry consensus meant that each participant had a veto. Once a code is adopted, a new challenge arises surrounding its enforcement. Just what happens when a company thumbs its nose at the code? In fact, on the example of the industry being asked to amend the Wireless Code, the majority of the companies—including all the major companies—respected the additional provision but were unhappy when it was not universally adopted in practice.

Today there are over 275 NFPA codes and standards ranging from fire codes, to the National Electric Code, to the standards for safety matches.

Since 1895 industries have looked to self-developed codes for both safety and coordination. Many, like the National Electric Code, are subsequently adopted into law and governmentally enforced. Unfortunately, for consumer-facing digital platforms such an industry-developed, governmentally overseen code does not exist. The focus of the DPA should be to overcome this shortcoming through a government-convened Code Council of industry and public representatives, accompanied by appropriate agency oversight of the process and enforcement of the outcome.

Precedents in the U.S. (Governmental)

The National Fire Protection Association and American Society of Civil Engineers are self-regulatory organizations whose codes are often enforced by government. There are also SROs that assume regulatory authority from the federal government.

The North American Electric Reliability Corporation (NERC) was formed by the industry in 1968 to promote a reliable and adequate energy supply to electric utilities. Rather than binding "standards," NERC produced voluntary industry "policies." The 2003 Northeast power blackout, however, demonstrated the need for something more than voluntary "policies."

The Energy Policy Act of 2005, passed in response to the blackout, mandated the creation of an Energy Reliability Organization (ERO) to develop and enforce compliance with mandatory reliability standards. The Federal Energy Regulatory Commission (FERC) appointed NREC to be that ERO and gave it the responsibility of developing and enforcing these mandatory rules. In July 2006, NERC filed its first mandatory Reliability Standards with FERC.

The Financial Industry Regulatory Authority (FINRA) is another SRO with governmentally delegated and supervised authority. FINRA regulates brokerage firms and exchange markets through registration and examination to determine compliance with applicable financial market laws. FINRA also oversees the arbitration of disputes between consumers and member financial institutions, as well as industry advertising practices.

The Securities and Exchange Commission (SEC) oversees FINRA's application of the statutes and SEC rules, including, where applicable, proposing FINRA rules. Typically, the process begins with FINRA filing a proposed rule with the SEC, publication of the proposal in the Federal Register and receipt of comments. The SEC reviews the proposal, the public comments, as well as FINRA's input prior to a determination whether the proposed rule is consistent with the requirements of the Exchange Act governing the financial markets. Under the Dodd-Frank Wall

Street Reform and Consumer Protection Act, the SEC's authority to directly disapprove a rule or to institute proceedings to determine whether to disapprove a proposed rule was expanded.

The Dodd-Frank Act also mandated a review of FINRA's activities by the Government Accountability Office (GAO). The review found a need for the SEC to "enhance its oversight of FINRA."[95] Among the findings was "the level of SEC's oversight…has varied." Improvements were recommended for a "process for examining FINRA's reviews" of its policies as well as the development of a risk-management framework to evaluate the effectiveness of FINRA's rules.

Since 1895 industries have looked to self-developed codes for both safety and coordination.

The DPA builds on these experiences, beginning with the establishment of a legal framework rooted in common law-derived principles and expressed in a code construction process applicable to the consumer-facing digital marketplace. The Code Council's decisions, once affirmed by the DPA, will be agency enforceable decisions.

Precedents Elsewhere

The idea of industry-developed, government-overseen digital practices has a prominent example in the U.K. The regulator that put the initial plan in place is presently expanding its concept into other areas as well.

The U.K.'s Open Banking[96] Initiative was ordered for the country's nine largest financial institutions by the Competition and Markets Authority (CMA).[97] The CMA itself was created in 2012 by merging two predecessor agencies in order to strengthen competition protection activities. The CMA is a non-ministerial agency akin to the independent agencies of the U.S. government.

The purpose of the open banking order was to increase competition in financial services by allowing consumers to request that the data the banks held about them would be shared with new competitors, both smaller banks as well as online services. In 2016, after the previous "My Data" initiative failed because of industry intransigence, the CMA ordered the covered banks to create, fund and operate the Open Banking Implementation Entity (OBIE).[98]

The OBIE was required to establish standards for mandatory open Application Programming Interfaces (APIs) that would allow different entities to access and interface with the banks' databases. The OBIE is overseen by a Trustee appointed by the CMA. The Trustee is empowered to take "proportionate and reasonable" actions to establish standard data structures, security architecture, and other practices necessary for non-affiliated companies to utilize the customer's information.[99]

95 U.S. Government Accountability Office, Securities Regulation: *Opportunities Exist to Improve SEC's Oversight of the Financial Industry Regulatory Authority* (Report to Congressional Committees) (May 2012), https://www.gao.gov/products/GAO-12-625.

96 Bill Roberts, *Celebrating the first anniversary of Open Banking, Competition and Markets Authority* (Jan. 11, 2019), https://competitionandmarkets.blog.gov.uk/2019/01/11/open-banking-anniversary/.
https://www.gov.uk/government/organisations/competition-and-markets-authority.

97 *Id.*

98 Open Banking, *About Us,* (n.d.), https://www.openbanking.org.uk/about-us/

99 Author interview with Imran Gulamhuseinwala, Trustee, Open Banking, Ltd.

The European Union has developed a similar open banking requirement for its member nations. This Payment Services Directive (PSD2) utilizes a more traditional top-down regulatory approach.[100] Under PSD2 the financial institutions are told what to do, but not how to implement it. As a result, there are no common standards for APIs or for the validation of companies with access to the data.

As of mid-2020 there are 90 banks that are not covered by the OBIE that nonetheless follow its practices in order that they, too, can participate in the shared data program. Open APIs became widely usable in the late summer of 2019. In the 12 months that followed, slightly fewer than 200 third party competitive service providers have been authorized to participate in the program and 70 are operational.[101]

Digital markets will only work well if they are supported with strong pro-competition policies.

The Open Banking Initiative was prominently featured in the March 2019 report by a U.K. government-convened Digital Competition Expert Panel chaired by former Chairman of the White House Council of Economic Advisors Jason Furman. The Johnson government's March 2020 Budget provided that "[t]o empower consumers and boost competition, the government will accept all six of the Furman Review's strategic recommendations for unlocking competition in digital markets."[102]

The conclusion of the Furman Review was that "digital markets will only work well if they are supported with strong pro-competition policies" but that traditional antitrust policies are a blunt instrument to achieving that goal. "The biggest gains," the report concluded, "will come from going beyond these [traditional] tools to focus on policies that actively promote competition, foster entry by competitors, and benefit consumers."

When it came to advertising-supported digital services, the Furman Review recommended creation of a "code of competitive conduct with the participation of stakeholders" similar to the Open Banking Initiative. Those stakeholders would be companies "deemed to have 'strategic market status,' in order to avoid creating new burdens or barriers for smaller firms."

In June 2019 the U.K. government announced plans to establish the Digital Markets Unit within the CMA.[103] The following December the CMA published an interim report seeking comments on the implementation of such activities.[104] A final report meant to guide implementing legislation, was published July 1, 2020.[105]

The conclusion of the final CMA report was that "these markets are so wide ranging and self-reinforcing that our existing powers are not sufficient to address them." The conclusion called for "a new regulatory approach" built around enforcement of "a code of conduct to govern the behavior of platforms with market power."

100 *Payment Services Directive,* Wikipedia (n.d.), https://en.wikipedia.org/wiki/Payment_Services_Directive.

101 Gulamhuseinwala interview, supra note 99.

102 *Budget 2020 Policy Paper,* U.K. House of Commons 121 (Mar. 11, 2020), https://www.gov.uk/government/publications/budget-2020-documents/budget-2020.

103 U.K. Prime Minister Theresa May, *London Tech Week.* (Opening speech) (Jun. 10, 2019), https://www.gov.uk/government/speeches/pm-speech-opening-london-tech-week-10-june-2019.

104 CMA Interim Report, *supra* note 22.

105 CMA Interim Report, *supra* note 14.

Initiation of the DPA Process

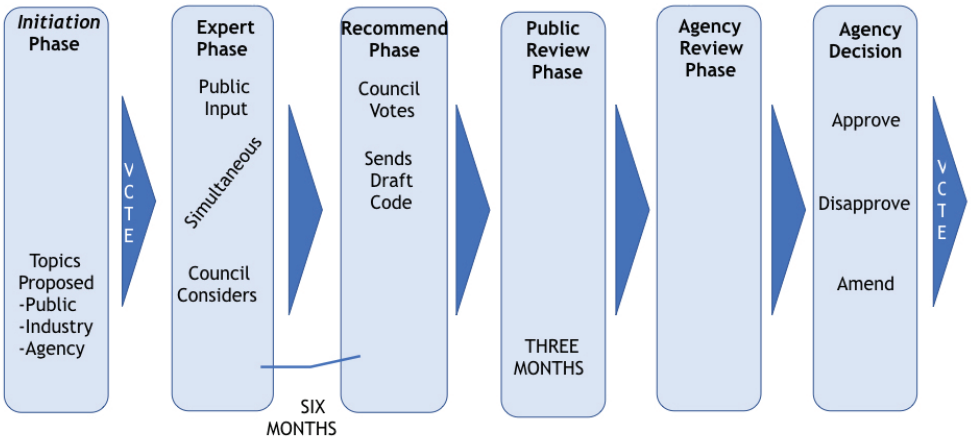
The DPA is first and foremost a regulatory agency charged with protecting consumers and competition. The innovative use of cooperatively developed codes is for the purpose of mitigating the traditional complaint of regulatory overreach and lack of agility, not the dilution of oversight.

The DPA is first and foremost a regulatory agency charged with protecting consumers and competition.

The DPA Code process can be initiated in three ways: (1) upon petition by the public or industry, (2) by a majority vote of the Code Council, or (3) by a majority vote of the DPA.

While it is likely that responsible members of the platform industry will recognize the necessity of certain actions, a necessary predicate to such self-realization is often the threat of independent regulatory action. Thus, the ability of the DPA to initiate rulemakings outside the Code process on its own initiative is an essential component of the new regulatory paradigm.

Workflow of a Digital Platform Agency



The Code Council

The heart of the DPA's new regulatory paradigm is the establishment of an industry/public/government Code Council charged with the responsibility of bringing forth for DPA approval or disapproval enforceable behavioral rules for affected companies. The Code Council does not itself have regulatory authority; its purpose is to supplement the traditional notice and comment rule-making of a federal agency with a process to develop behavioral codes that carry out the broad principles of the statute and are enforceable by the DPA.

The Code Council would be composed of members equally divided between industry representatives and representatives of the public. Each member would serve a staggered three-year term so that one-third of the Council rolls over an-

nually. Council members shall have demonstrated expertise in digital technology as well as its economic and social effects. Members will be expected to treat the Council in a manner similar to that of industry representatives on U.S. delegations to international conferences with individual obligations to unbiased, faithful service. The Council shall utilize the professional staff of the DPA.

The Code Council would be composed of members equally divided between industry representatives and representatives of the public.

The Chairman and Vice Chairman of the Council will rotate annually (i.e., one-year industry is chair and public is vice chair, the next year it reverses). The Council should formally meet not less than monthly with ongoing activities between meetings. These meetings will be transactional, not pro forma, meaning that the Council members will engage in public debate and discussion.

Code Council Procedures

The Council shall act through a multi-step process to develop the specifics of an enforceable Code to be recommended to the DPA:

- "Initiation Phase" based on inputs from the Code Council, the public, or the agency's own motion, the DPA votes to start a Code Council consultation.
- "Expert Phase" (effectively similar to a Notice of Inquiry) not to exceed six months during which the Code Council will examine and issue, and, if possible, propose a behavioral code. During this period, the Council will develop its own factual record. Included in this phase will be the submissions by any interested party—submissions that will be publicly disclosed.
- "Recommendation Phase" at the end of the Expert Phase—yet within its six-month timeline—when the Council forwards its recommendation and any relevant supporting material to the DPA. This submission may include, as appropriate, minority reports.
- "Public Review Phase" when the DPA, for a period of not to exceed three months, receives public comments on the recommendation—submissions that will be publicly disclosed.
- "Agency Review Phase" in which the DPA reviews both the Code Council's recommendation and public input.
- "Agency Approval, Disapproval and/or Amendment Phase" in which the DPA decides by majority vote whether to adopt, reject or amend on a line item basis the Code Council's recommendation. Regardless of which action is taken, the agency shall provide its rationale to the public.

The use of the Expert Phase is not mandatory. The DPA may, by majority vote and on its own initiative, commence a proceeding to adopt rules.

- The DPA shall publish its proposal and allow for up to six months of public comment, including comment from the Council. Such comment is to be on the record and made public.
- Should the DPA proceed on its own motion, it shall not adopt a proposal in less than six months absent exigent circumstances.

DPA Enforcement Authority

The DPA should have the authority to prosecute violations of both the authorizing legislation as well as the regulations promulgated pursuant to that statute. This shall include the issuance of injunctions and the levying of fines. The DPA shall have adjudicatory authority, concurrent with federal courts, over alleged violations of its rules brought by third parties.

The DPA should have the authority to prosecute violations of both the authorizing legislation as well as the regulations promulgated pursuant to that statute.

The authorizing legislation should include a private right of action for persons claiming to be damaged by violations of the act. Complainants have the right to elect adjudication either by the federal judiciary or the DPA. Any complaint must be filed within three years of the time of the alleged violation.

Information-Based Government

In the information age, it is more important than ever that federal agencies have access to facts upon which to base a decision. A 2010 U.S. Senate Report accompanying legislation to enhance cyber resiliency stated, "Our government is still organized for the Industrial Age, for assembly lines and mass production. It is a giant, hierarchal conglomerate where the cost of obtaining information and making decisions is high when moving across organizational boundaries. Yet, the Administrative Procedure Act (APA) requires decisions to be made on the facts developed in a proceeding's record.

Unfortunately, the salient facts often are controversial and even elusive. It is not uncommon for advocates to be selective in their presentation of facts in order to manipulate them to their own benefit. Similarly, there has grown up in Washington a cadre of professional commentators and analysts that serve their often-undisclosed corporate sponsors by furthering the selective manipulation of facts.

The DPA requires its own fact-gathering capabilities, including the ability to utilize machine learning and artificial intelligence technology. It would be foolhardy to expect an overseer of the algorithm-driven digital economy to rely on 20th century human-based information gathering and analysis. The tsunami of data-driven actions of the platform companies are unintelligible without the help of machine intelligence. To expect humans to keep pace with algorithm-driven data would be to condemn the DPA to looking at the tsunami through a straw.

The agency's data collection should include the full authority to investigate any entity or activity within its jurisdiction, including the authority to propound interrogatories and to subpoena documents and testimony. The DPA also requires the ability to levy penalties against those who provide inadequate or inaccurate information.

About the Authors

Tom Wheeler is a businessman, author, and was the 31st Chairman of the Federal Communications Commission (FCC) from 2013 to 2017. He is presently a Senior Fellow at the Shorenstein Center at Harvard Kennedy School and a Visiting Fellow at the Brookings Institution.

Phil Verveer has a distinguished legal career in government service and private practice. He is the former Deputy Assistant Secretary of State for International Communications and Information Policy and Senior Counsellor to the Chairman of the FCC. He has the distinction of being the first lead counsel on *United States v. AT&T* which resulted in the breakup of AT&T. He is presently a Senior Fellow at the Shorenstein Center at Harvard Kennedy School.

Gene Kimmelman is one of the nation's leading consumer protection advocates. With a career that has extends from the Antitrust Subcommittee of the United States Senate to the Antitrust Division of the Department of Justice, and public advocacy groups such as Consumers Union and Public Knowledge. He is presently a Senior Fellow at the Shorenstein Center at Harvard Kennedy School.

Acknowledgments

This project began under the leadership of Nicco Mele at the Harvard Kennedy School Shorenstein Center. When he left, it was been pushed forward and strongly supported by the new Director of the Shorenstein Center, Nancy Gibbs. Setti Warren provided invaluable support and guidance.

The John S. and James L. Knight Foundation provided financial support to the Shorenstein Center in behalf of this project.

The collaboration of our colleague Dipayan Ghosh was critical from the start of this project. His excellent book, Terms of Disservice" (Brookings, 2020) is an effective predicate to the conclusions of this paper. He is the Fourth Horseman of this project.

The authors benefited greatly from the comments and insights of Jason Furman, Tim Massad, Philip Marsden, Amelia Fletcher, Imran Gulamhuseinwala, Andrea Coscelli, Alex Petros, Will Jennings, and Kathleen Burke. Thank you also to Eva Weber for preparing this document for publication.