



## Online Platforms and Market Power, Part 2: Innovation and Entrepreneurship

---

*Testimony of*

Morgan Reed  
President  
ACT | The App Association

*Before the*

U.S. House of Representatives Judiciary Committee,  
Subcommittee on Antitrust, Commercial and Administrative Law



1401 K Street NW Suite 501  
Washington, DC 20005

 202.331.2130  
 [www. ACTonline.org](http://www.ACTonline.org)

 @ACTonline  
 /ACTonline.org

# I. Introduction

We applaud the House Judiciary Committee's Subcommittee on Antitrust, Commercial and Administrative Law for holding this hearing on innovation and platforms and examining important competition law concepts as they apply to the dynamic app economy and platforms. In previous competition hearings across Capitol Hill, Members of Congress heard from a broad swath of large company and consumer group interests. Even in those hearings, the discussion turned to how the consolidation and practices of large platforms affect innovative small businesses like ACT | The App Association members. The time is right to consider the views of our members, and we commend the Subcommittee for giving small companies a voice on the role of competition law in safeguarding innovative market activity and job creation in tech-driven industries.

The App Association is a trade group representing about 5,000 small to mid-sized software and connected device companies across the globe. In the United States, our member companies are part of a \$1.3 trillion industry, supporting about 5.7 million jobs. We regularly participate in legal and regulatory proceedings affecting the relationship between consumers, small innovators, and platforms.<sup>1</sup> Further, we actively facilitate engagement between app developers, investors, and platforms in fora across the country.<sup>2</sup> We will continue this engagement by hosting events across the nation this year, with a list of destinations that includes Atlanta, New York, Providence, and Denver. The constituents of members of this Committee are driving competition in the platform ecosystem, and with these events, we aim to show that innovation is happening everywhere in the United States.

While competition is not a static concept, static antitrust principles should guide antitrust authorities as they enforce antitrust laws, including where acts or practices foreclose competition and harm consumers. We urge this Committee to carefully consider how any potential changes to competition law would affect industries across the economy. There is no longer a "tech industry" as it was commonly perceived when personal computers (PCs) first connected to the internet. Ubiquitous connectivity and access to cloud computing superimpose a tech-driven element to virtually all industries across the economy. As a result, competition has new and dynamic characteristics not just in tech, but everywhere. App Association member companies are at the center of these market changes and their continued ability to create jobs in your congressional districts depends on robust enforcement of antitrust laws where appropriate and allowing competition to take place where intervention is inappropriate.

This hearing takes place at an important moment for antitrust law in our history. The proliferation and democratization of technology create less definable markets where value chains are not as traceable, based on data rather than tangible goods, and undergirded by two-sided platforms. We call on the Committee to appreciate the complexity of the market while also keeping in mind a few straightforward concepts that define the evolution of platform-driven markets. First, app developers have direct relationships with their customers and clients—they are not “suppliers or manufacturers” of apps on behalf of platforms. Second, platforms provide significant value for developers and consumers, demonstrated by the increase in choices, access to new markets, and the reduction in prices for software since platforms entered the market. Third, platforms are not perfect. Developers want more transparency and continued improvements to security and safety. Our member companies want platforms to compete for their business, and they want to ensure competition is robust.

## II. Platforms Provide Greater Autonomy to Developers

Before discussing the details of modern mobile software markets, we should establish some basic parameters. Although platforms help software developers and device makers reach their clients and customers, the relationship between the client or customer and the developer is direct. The majority decision of the Supreme Court of the United States (SCOTUS) in *Apple v. Pepper*—a split 5-4 decision—mistakenly conceives of platforms as “retailers” of apps, while app developers are mere “manufacturers or suppliers.”<sup>3</sup> But our member companies do not “manufacture” or “supply” software on behalf of a platform. Platform companies do not order apps to be built to specifications like they would with contract manufacturers. Developers sell directly to consumers and clients.

In *Apple v. Pepper*, SCOTUS was grappling with whether an app buyer has standing to sue a platform company under antitrust law, even though the app developer sets the app’s price. Important to that determination is whether the buyer is also a direct buyer from the platform, which in turn is in part a function of whether the developer’s product is distinct from the platform’s. This line-drawing may seem semantic, but it is an important exercise from a competition perspective. Developers can choose the best platform through which to reach these customers and clients, and platforms compete with each other for the ability to provide that service to our member companies. The result of *Apple v. Pepper* is that legal precedent now treats app developers as part of a distribution chain controlled by platforms, at least for purposes of whether a platform can be sued for app prices charged by app developers. But the relationships between developers and their customers and clients are direct and separate from the exchange of value for app developer services that comprises the platform-to-business market.

### III. Platforms Have Reduced Costs for Developers and Enhanced Competition and Choices for Consumers

Consumers and developers experienced significant changes since the various platforms entered the market. In addition to having more choices, consumers also benefit from lower prices for software and even access to new markets that did not previously exist. Similarly, developers benefit from lower overhead costs, built-in customer trust, and wider distribution and market access.

Choices proliferated because entry into the software market is much easier now than it was before platforms.<sup>4</sup> Before platforms, the nature of the marketplace forced software developers to take on tasks that were well beyond their core competencies—from marketing to protecting their intellectual property and negotiating with a variety of different types of companies to distribute their products. The transaction costs of taking on all these extra tasks were significant, and platforms have eliminated many of them.

Before the ubiquity of mobile platforms, the software ecosystem ran on personal computers. This forced early app companies, often with teams of one to two developers, to wear many hats to develop, market, and benefit from the sale of their products. App companies were not only required to write code for their products, but they were also responsible for: 1) managing their public websites, 2) hiring third-parties to handle financial transactions, 3) employing legal teams to protect their intellectual property, and 4) contracting with distributors to promote and secure consumer trust in their product. App developers, trained in software coding and project management, were not well-equipped to carry out these tasks, and the additional steps cost them valuable time and money, with little tangible benefit.

Without platforms, developers had to take all of these additional steps, creating friction at each point, which meant that the only software titles that were available to the public were those that made the complicated journey from development to publishers to retailers like CompUSA or Best Buy. At one point, in 2003, CompUSA rolled out an early concept of a software platform consisting of a kiosk that burned made-to-order CDs containing software applications. With this system, the retailer could offer more software programs than it could fit on its shelves (which is how software was sold at that time), providing 1,200 titles from 200 different publishers.<sup>5</sup> Now, there are more than 317,673 companies active in the mobile app market in the United States<sup>6</sup> and more than 2 million apps available on the major app platforms. The kiosks are now in our smartphones—there are more than 5.28 billion mobile broadband subscriptions worldwide as of 2018<sup>7</sup>—which are in the pockets of over 80 percent of Americans.<sup>8</sup> In an especially illustrative example of how the instantaneous worldwide distribution platforms has led to lower costs, optical character recognition (OCR) software Omnipage cost a staggering \$450 in 2006.<sup>9</sup> Now, most OCR apps cost \$10 or less,<sup>10</sup> thanks to the availability of a much wider market enabled by platforms.

In the internet economy, immediate consumer trust is almost impossible without a substantial online reputation, and not attaining it spells death for any app company. However, what does “trust” mean? In this context, trust refers to an established relationship between the app company and consumer where the consumer has the confidence to install the app and disclose otherwise personal information to an app company. Prior to platforms, software developers often handed over their products to companies with a significant reputation to break through the trust barrier.

Bungie—developer of popular games Halo, Myth, Oni, and Marathon—chronicled in 1996 the difficult and sometimes oppressive distributor requirements placed on software developers that predated the platform ecosystem. When dealing with retail distributors, Bungie was required to guarantee a competitive price, pay 3 to 6 percent of sales as a marketing fee in addition to \$10,000 for product launch marketing, pay the shipping costs to deliver their products to distributors, and agree to buy back unsold products.<sup>11</sup> Once contracts were negotiated, software developers were often required to spend additional money so that in-store catalogs would feature their product or retail stores would place their product on an end cap display, all before consumers even saw the products.<sup>12</sup>

However, with the advent of the smartphone, the experience Bungie described is a relic of the past. The smartphone, in its brief history, revolutionized the economy at large and established a symbiotic relationship between platforms and developers. And in the decade since the introduction of the App Store and other platforms, those developers and app companies contributed both to the overall success of smartphones and improved their functionality for consumers.

At first, developers were reluctant to join platforms, worried that the model might not accommodate their ability to “launch fast and iterate”<sup>13</sup> their apps. But successful platforms changed the app ecosystem by providing app developers with ubiquitous access to a broader swath of consumers. Platforms provide a centralized framework for app developers to engage and secure visibility with the 3.4 billion app users<sup>14</sup> worldwide. With lower costs and barriers to entry, both fledgling and established app developers can find success. For example, educational app company L’Escapadou secured 1.3 million downloads and earned more than \$1.5 million from app sales between 2010 and 2014,<sup>15</sup> a success attributed to the centralized nature of platforms. Founder Pierre Abel specialized the language, content, and pricing of each of his apps based on consumer and market needs and marketed them on different platforms to reach a variety of consumers around the world.<sup>16</sup>

## IV. There’s a Platform for That

As successful as the past 12 years have been for the app economy, the next decade could be even better. In just the first half of 2019, the two major app stores generated \$39.7 billion in revenue—a robust 15.4 percent increase over the first half of 2018’s \$34.4 billion.<sup>17</sup> This growth suggests the developer-platform model is still succeeding. Moreover, app economy growth is likely to continue because developers are continuing to create new products, services, and markets that did not exist prior to platforms. Perhaps the most notable of these is the market for ridesharing. Connecting a driver—using his or her own car—to a potential passenger in real-time for an on-demand ride to a destination selected by the passenger was impossible before developers could use the GPS capabilities and data connections of smartphones. Ridesharing is an important example of how app developer ingenuity meets the capabilities, built-in trust, and developer services of platforms to create new options for consumers.

The same combination of technologies and network effects has created new possibilities for delivery services. For example, GetSwift created a white label—that is, a program created by GetSwift but with the client’s branding—delivery tool enabling shippers in any type of industry to move their products to their customers quickly, efficiently, and easily.<sup>18</sup> The application works the same whether the shipper is a restaurant delivering food, an auto parts store supplying repair shops, a lumber yard supplying a job site, or a rural farm that delivers fresh vegetables to homes and restaurants, as the real-time connectivity provided has been shown to reduce late or missed deliveries by more than 25 percent.<sup>19</sup>

Just as ridesharing fundamentally changed how we get around, developers and platforms also revolutionized how we access healthcare. A current shortage of about 30,000 physicians in the United States—which is projected to increase to about 90,000 in the next 15 years—contributed to the need for caregivers and patients to find new ways of communicating. Devices, sensors, and software are now capable of gathering and analyzing physiological data like movement, heart rate, or blood oximetry so that physicians can better monitor their patients and address potential problems before they occur or worsen.<sup>20</sup> Studies show that preventive care regimes that use connected health tools are especially useful for patients with chronic conditions like diabetes and heart failure, which tend to affect underserved communities especially.<sup>21</sup> But how do these capabilities reach patients and consumers, specifically those who need them most? Most Americans already interact with platforms, through a variety of different types of devices. We know that smartphone adoption rates are increasing among underserved populations in the United States and that for many, their handheld device is their only means of accessing the internet.<sup>22</sup> Here again, developers are leveraging the ubiquity and trusted framework of platforms to produce healthcare innovations that address a variety of health conditions. Moreover, in this case, the platform-developer dynamic helps caregivers reach patients in rural and underserved areas.

Finally, the platform-driven app economy gave rise to a new set of business-to-business markets. Many of our member companies fall into the category of white label software developer, commonly referred to as a “dev shop.” Dev shops like MojoTech based Providence, RI (with an office in Boulder, CO), serve a variety of clients from healthcare to finance, eCommerce and data visualization suppliers.<sup>23</sup> Although software-as-a-service (SaaS) existed prior to platforms, these dev shops leverage the platform infrastructure, along with continuous cloud access, to create custom software solutions that adapt quickly and rival the products and services of larger SaaS companies. As MojoTech puts it, “Big no longer eats small – fast eats slow.”<sup>24</sup> Similarly, Orlando-based Concepta has fewer than 50 employees and yet builds sophisticated technology tools for clients like Walt Disney World and Warner Music Group.<sup>25</sup> It is one of the 10 fastest-growing companies in the Orlando area. This is possible because platform-enabled market entry put small companies on the same playing field as larger companies, allowing them to compete for the same customers, users, or clients.

It is hard to argue that the creation of new markets is an anticompetitive development. Moreover, the competitive conditions over the past 10 years, and presently, suggest that the nature of competition in this space will continue to evolve and benefit consumers on the whole. One of the central markets at issue in the debate around the role of antitrust in the platform ecosystem—informally, we could call it the market for developer services, where a developer pays a platform for various services including distribution, marketing, etc.—also experiences vigorous competition. There is a tendency to include only two platform companies, Apple and Google, in this category of competitors. But for developers, the market is much wider. A game developer can choose platforms like Epic or Steam and enterprise

developers can look to hundreds of proprietary, custom platforms or could create their own. For example, companies like App47 create app platforms for everything from “bulldozers to ultrasound devices.”<sup>26</sup> Moreover, for developers looking to reach a general audience, using the web is an alternative, especially for companies that are looking for different kinds of distribution or search services than those available on platforms. Additionally, Amazon and Facebook often present options for developers looking to reach consumers while the reach of giant Chinese platforms dwarfs that of U.S. companies. It should be noted, however, that there are arguably some important distinctions between software platforms—which provide a marketplace for software apps like the App Store—and aggregators that connect people with information and run on data.<sup>27</sup> These differences illustrate the diversity in the market for distribution methods, as developers may prefer one model over another.

Perhaps most importantly, the universe of platforms is continuing to evolve and expand as different kinds of hardware begin to connect to the network. New platforms are cropping up for wearables like FitBit. Connected home setups and cars that are increasingly autonomous are driving cross-platform interoperability so that Alexa or Cortana can communicate with your Samsung appliances or your Ford Fusion—further weighing against conceptions of platform markets where a single player wields market power. Moreover, pricing is competitive too, as developer services on the largest platforms for the 90 to 95 percent of apps offered for free only cost the developers a \$100 registration fee. These characteristics tend to show that developer services will continue to improve and evolve along with demand. Enforcement of antitrust laws is necessary where market power exists and is used to raise prices undisciplined by competition, maintain a monopoly position, or lower quality or decreases output. But when those factors are not present and competition drives the market, as it does in developer services, intervention is unlikely to help and may harm competition or consumer welfare.

## V. Platforms Aren't Perfect

Although developers can choose from multiple platforms, there is no such thing as a perfect platform. Our member companies pay a fee for developer services to platforms, and they expect those services to meet their needs. Just as online companies must clearly communicate their data practices to consumers, so must platforms clearly define the requirements and details of their terms of service to developers. For example, when platforms change their developer guidelines, they must communicate clearly and ensure developers understand what the changes mean for them and their customer relationships. Occasionally, we hear from a member company that an ill-defined change significantly impacted their business. For example, a platform recently put a member company that provides a call blocking app on notice for temporary removal unless it made changes to how it obtained permission for gathering incoming call data.<sup>28</sup> The platform did not clearly explain how its policies changed or why they would necessitate action on the app's part, but it was the first removal notice of its

kind in the app's nine years on the platform. Ultimately, the platform did not remove the app, but the process for remaining on the store was opaque and difficult enough to navigate that the company looked to us, their trade association, for help. Relevantly, this occurred amid a major update to California's privacy laws, so it may be an example of the unintended consequences of government intervention.

Especially for enterprise app developers, a platform's safety and security are important elements of developer services. Platforms' security features improved markedly over the course of their existence. Whereas unlocking a device used to require a four-digit passcode, devices are now capable of biometric-based authentication, and platforms make these authentication measures available to developers as well so that they can also benefit from these heightened security measures. But the game of cat-and-mouse between cybersecurity professionals and hackers will never end, and security must continue to evolve to meet and beat the threats. Although some platforms do not control device security, developers want the platform's security features to work seamlessly with any relevant hardware and that they account for all attack vectors. Platforms should continue to improve their threat sharing and gathering capabilities to ensure they protect developers across the platform, regardless of where threats originate. Moreover, they should approve and deploy software updates with important security updates rapidly to protect consumers as well as developers and their clients and users. The same is true when it comes to privacy controls. App developers strongly desire platform-level privacy controls they can adapt for their products and services. The types and nature of these controls vary among platforms and this variation should result in continuously improving options that iterate with end user expectations and privacy risks.

Similarly, platforms play an important role in helping small developers enforce their intellectual property (IP) rights. Our member companies' IP helps eliminate the inherent disadvantages of being a small, innovative company by enabling them to protect the fruits of their ingenuity from larger firms that might want to take it. Unfortunately, some of our member companies fell victim to IP thieves that succeed in selling the pirated content or using it to steal ad revenue on platforms. Ad networks can and do help mitigate the pirated ad revenue problem,<sup>29</sup> but platforms must also vigorously police their app stores for stolen content. With vast online stores, it is difficult for a platform to verify legitimate requests to remove allegedly pirated content. But a single app developer should not need the help of a legal team or trade association to resolve the issue. In one instance, an App Association member company, Busy Bee Studios, approached us when it was unable to convince the platform to investigate an app that appeared to have been stolen from Busy Bee. With our assistance, the platform investigated the issue and found that the infringing app was in fact stolen content.<sup>30</sup> But the time and resources it took our member company—which only has a few employees—to resolve the issue were significant and could have gone toward the development of their next app. Since this issue arose, IP resolution processes improved across the board, but the story is a reminder that they are important and in-demand developer services that platforms should improve in order to compete for developers.

# Conclusion

We appreciate this opportunity to provide testimony in this important hearing. Our member companies have a strong interest in maintaining a competitive app economy that enables them to compete with larger firms and continue to create innovative products and services for their customers and clients. The entry of platforms created novel opportunities for consumers and developers. But while platforms provide some of the infrastructure, developers bring smart devices to life. Without apps, a smartphone is just a phone. The symbiotic relationship between apps and platforms is not perfect, but it has created a powerful ecosystem that continues to benefit consumers. We look forward to discussing the pro-competitive effects and antitrust concerns platforms have generated and welcome this debate.

# End Notes

<sup>1</sup> See, e.g., Brief for ACT | The App Association as Amicus Curiae Supporting Petitioner, *Apple v. Pepper*, 587 U.S. \_\_\_\_ (2019) (No. 17-204), available at <https://actonline.org/wp-content/uploads/ACT-Amicus-Apple-v.-Pepper.pdf>; Comments of ACT | The App Association to the Fed. Trade Comm'n on Competition and Consumer Protection in the 21<sup>st</sup> Century (Question 3: "The Identification and Measurement of market power and entry barriers, and the evaluation of collusive, exclusionary, or predatory conduct or conduct that violates the consumer protection statutes enforced by the FTC, in markets featuring "platform" businesses," Aug. 20, 2018, available at <http://actonline.org/wp-content/uploads/Q3-ACT-Comments-re-FTC-2018-Consumer-Protection-Hearings-082018-FINAL.pdf>.

<sup>2</sup> See, e.g., ACT | The App Association, "Queen City Mobile Summit highlights Cincinnati as mobile tech hub," (Feb. 23, 2016), available at <https://actonline.org/2016/02/23/queen-city-mobile-summit-highlights-cincinnati-as-mobile-tech-hub/>.

<sup>3</sup> *Apple v. Pepper*, 587 U.S. \_\_\_\_ (2019) (No. 17-204), at 2 (May 13, 2019).

<sup>4</sup> Daniel Ershov, The Effects of Consumer Search Costs on Entry and Quality in the Mobile App Market, TOULOUSE SCHOOL OF ECON. (Apr. 18, 2018), available at [https://www.cemfi.es/ftp/pdf/papers/wshop/DErshov\\_MobileAppCompetition\\_Jan2018.pdf](https://www.cemfi.es/ftp/pdf/papers/wshop/DErshov_MobileAppCompetition_Jan2018.pdf).

<sup>5</sup> Brian Osborne, "CompUSA offers software vending machines," GEEK.COM (Dec. 12, 2003), available at <https://www.geek.com/news/compusa-offers-software-vending-machines-551706/>.

<sup>6</sup> Deloitte, The App Econ. In the United States (Aug. 17, 2018), available at <http://actonline.org/wp-content/uploads/Deloitte-The-App-Economy-in-US.pdf>.

<sup>7</sup> Mike Murphy, "Cellphones now outnumber the world's population," QUARTZ (Apr. 29, 2019), available at <https://qz.com/1608103/there-are-now-more-cellphones-than-people-in-the-world/>.

<sup>8</sup> Adam Lella, U.S. Smartphone Penetration Surpassed 80 Percent in 2016, COMSCORE (Feb. 3, 2017) Available at: <http://bit.ly/2pT04qo>.

<sup>9</sup> Richard Jantz, "First-Class OCR for a Price," PCWORLD (Sept. 27, 2005), available at <https://www.pcworld.com/article/122669/article.html>.

<sup>10</sup> Jill Duffy, "The Best Mobile Scanning and OCR Apps," ZAPIER (Sept. 3, 2018), available at <https://zapier.com/blog/best-mobile-scanning-ocr-apps/>.

<sup>11</sup> Alexander Seropian, Distribution Myths and Lies, TidBITS (Nov. 4, 1996) available at <http://bit.ly/2hitGau>.

<sup>12</sup> Alexander Seropian, Distribution Myths and Lies, TidBITS (Nov. 4, 1996) available at <http://bit.ly/2hitGau>.

<sup>13</sup> To launch fast and iterate is often used to describe a software developer's business plan, where software developers like to launch products as soon as they are finished and like to update newer iterations of their product actively. Paul Graham, Apple's Mistake, paulgraham.com (Nov. 2009), available at <http://www.paulgraham.com/apple.html>.

<sup>14</sup> Simon Kemp, The global state of the internet in April 2017, TNW (last visited Jan. 17, 2018) Available at: <https://thenextweb.com/contributors/2017/04/11/current-global-state-internet/>.

<sup>15</sup> Steve Young, Making \$1.5 Million with Educational Apps with Pierre Abel, App Masters (Apr. 30, 2015) Available at: <http://bit.ly/2hgDzZH>.

<sup>16</sup> Steve Young, Making \$1.5 Million with Educational Apps with Pierre Abel, App Masters (Apr. 30, 2015) Available at: <http://bit.ly/2hgDzZH>.

<sup>17</sup> SensorTower Store Intelligence, "Global App Revenue Reached \$39 Billion in the First Half of 2019, Up 15% Year-over-Year (Jul. 9, 2019), available at <https://sensortower.com/blog/app-revenue-and-downloads-1h-2019>.

<sup>18</sup> GetSwift, available at <https://www.getswift.co/>.

<sup>19</sup> Case Studies, GETSWIFT, available at <https://www.getswift.co/getswift-case-studies>.

<sup>20</sup> See, e.g., HOW MABU WORKS, CATALIA HEALTH, available at <http://www.cataliahealth.com/how-it-works/>.

<sup>21</sup> See, e.g., Clinical Outcomes, Care innovations, at 2, available at [http://www.connectwithcare.org/wp-content/uploads/2017/06/2016\\_Outcomes\\_Clinical-1.pdf](http://www.connectwithcare.org/wp-content/uploads/2017/06/2016_Outcomes_Clinical-1.pdf) (showing the results of a study by Care innovations and University of Mississippi Medical Center, indicating that the first 100 patients with diabetes enrolled in a program with a remote monitoring component saved the state \$336,184 in Medicaid dollars over six months); Testimony of Michael P. Adcock, Exec. Dir., University of Mississippi Med. Ctr., Hearing on "Telemedicine in the VA: Leveraging Technology to Increase Access, Improve Health Outcomes & Lower Costs," (May 4, 2017), available at <https://www.appropriations.senate.gov/imo/media/doc/050417-Adcock-Testimony.pdf> ("The Mississippi Division of Medicaid extrapolated this data to show potential savings of over \$180 million per year if 20 percent of the diabetics on Mississippi Medicaid participated in this program").

<sup>22</sup> Charkarra Anderson-Lewis, MPH, PhD, et al, “mHealth Technology Use and Implications in Historically Underserved and Minority Populations in the United States: Systematic Literature Review,” (Jun. 18, 2018), available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6028762/>.

<sup>23</sup> MOJO TECH, available at <https://www.mojotech.com/>.

<sup>24</sup> How We Work, MojoTech, available at <https://www.mojotech.com/how-we-work/>.

<sup>25</sup> Concepta, available at <https://conceptainc.com/>.

<sup>26</sup> APP47, available at <https://app47.com/>.

<sup>27</sup> See, e.g., Ben Thompson, “Tech’s Two Philosophies,” STRATECHERY (May 9, 2018).

<sup>28</sup> Graham Dufault and Madeline Zick, “What’s More Control with Fewer Options?” ACT | THE APP ASSOCIATION (May 21, 2019), available at <https://actonline.org/2019/05/21/whats-more-control-with-fewer-options/>.

<sup>29</sup> See, e.g., Trustworthy Accountability Group, available at <https://www.tagtoday.net/>.

<sup>30</sup> See Alex Cooke, Member Monday: How One Small Developer Fought a Rogue App, (Nov. 26, 2018), available at <https://actonline.org/2018/11/26/member-monday-how-one-small-developer-fought-a-rogue-app/>.

# Appendix: App Economy Innovators in Your Districts

## Majority

### **Chairman David Cicilline (RI-1)**

#### **Company: MojoTech**

Headquartered in Providence and founded in 2008, MojoTech has just over 50 employees. MojoTech is a software development firm with a service portfolio that includes iOS, JavaScript, API design and development, and agile/SCRUM and UX/UI/CX design. They have clients in varying industries from healthcare and finance to eCommerce. As suppliers of data visualization, MojoTech continues to advance the mission of each and every client. Although MojoTech began as an engineering-only consultancy, they adapted to the rise of cloud and mobile computing and expanded their development roster.

### **Vice Chair Joe Neguse [Ne-GOO-see] (CO-2)**

#### **Company: Sphero, Inc.**

Based in Boulder and founded in 2010, Sphero boasts more than 100 employees. Sphero is a consumer robotics and toy company that creates small, programmable robots controlled from a mobile app via a smartphone or tablet. Their products range from educational bots designed to teach children how to program to a little droid modeled after the loveable Star Wars character BB-8. Their robots are valuable teaching tools and used in more than 20,000 math and science classrooms in schools around the globe.

### **Representative Hank Johnson (GA-4)**

#### **Company: Turbojet Technologies**

Founded in 2015 just outside Atlanta, Turbojet Technologies is an individual web developer who works for other small businesses and non-profits. Turbojet provides website buildout, as well as support programs and integration across Drupal, WordPress, and other PHP-based websites. While Turbojet is a small operation, they occasionally hire contract designers from across the country if they need to scale up for a larger project.

### **Representative Jamie Raskin (MD-8)**

#### **Company: Simpalm**

Located in North Bethesda, Simpalm was founded in 2009 and is a full-service web and mobile application development shop with nearly 50 employees. Throughout their decade serving industries that range from entertainment and education to healthcare and government agencies, Simpalm completed more than 250 projects across a multitude of platforms, including Android, iOS, and Windows.

### **Representative Pramila Jayapal (WA-07)**

#### **Company: Digital World Biology LLC**

Headquartered in Seattle and founded in 2008, Digital World Biology creates digital educational tools to help students learn modern biology. Their app, Molecule World, is an easy to use visualization of 3D molecular structures ready for classroom use upon download. They also have a variety of textbook-like materials that help students learn quickly with visual aids and assist teachers with keeping students engaged with hands-on activities throughout the chapters.

### **Representative Val Demings (FL-10)**

#### **Company: Concepta Inc.**

Founded in Orlando in 2006, Concepta specializes in enterprise technology and the creation of innovative solutions in mobile, web, and other software development areas. Their international portfolio comprises Fortune 500 and Franchise 500 companies that include the likes of the Warner Music Group, General Electric, and Walt Disney World. With nearly 50 employees, Concepta built multiple top 20 apps on both the App Store and Google Play and is one of the 10 fastest-growing companies in Orlando.

### **Representative Mary Gay Scanlon (PA-5)**

#### **Company: MacGuyver Media**

MacGuyver Media is a custom web and application development company that creates web-based software solutions for businesses. Based in Glenolden, MacGuyver has only 5 employees and was founded in 2015. Through website, app, and e-commerce development, website maintenance and assessments, and the ability to integrate into any database or API source, MacGuyver provides their clients with solutions and services to help their businesses to succeed. Their clients range from companies in the financial sector to alcohol distribution and dozens more.

### **Representative Lucy McBath (GA-6)**

#### **Company: Zyrobotics, LLC**

Based in Atlanta, Zyrobotics is changing the way kids learn by creating educational tools that help build a quality STEM foundation for the next generation. Their lineup showcases a variety of products including an AI-powered learning tool that makes learning fun with educational games, connected e-books, learning analytics tools, and coding apps. Zyrobotics was founded in 2013 and has just over 10 employees.

## Minority

### Ranking Member Jim Sensenbrenner (WI-5)

#### Company: Access HealthNet

With 25 full-time employees, Access HealthNet is a small Milwaukee-based company founded in 2014 that created a thriving e-commerce platform for healthcare. Their platform allows users to browse and compare health services online and filter those services by distance, quality, cost, and more with helpful descriptions of the provider included. Their solution is intended to create the competition that drives healthcare prices down and allow both patients and employers to save money.

### Representative Matt Gaetz (FL-1)

#### Company: Core Mobile Apps

With nine employees, Core Mobile Apps has a broad reach across the United States and develops both mobile applications and web development for businesses. Their apps are available across various mobile platforms and include apps like Skill Set Connect, an app that connects digital nomads with people and businesses that need contracted development services.

### Representative Ken Buck (CO-4)

#### Company: Project Ricochet

Although Project Ricochet was founded in California, their largest collection of developers under one roof is in Greeley, Colorado. Founded in 2006, they have 13 employees and focus on web development and design services utilizing open source. Their specialties include Drupal, WordPress, and JavaScript. While typically providing services to larger companies across the United States, they hope to increase the local clientele in Greeley.

### Representative Kelly Armstrong (ND-At Large)

#### Company: Bushel

Founded in 2017 and headquartered in Fargo, Bushel is an agricultural technology company that provides a subscription-based web and mobile application specifically designed to harness reliable data for every level of the grain supply chain. The Bushel platform has more than 1,000 grain facilities that are active users including producers, retailers, and processors of grain. The platform covers contracts between grain facilities and their producers with an included e-signature capability to handle business on their app – all with no paper required.

### Representative Greg Steube (FL-17)

#### Company: Rave Digital

Rave Digital is a team of certified software engineers that provide customized web and mobile solutions across platforms. Founded in 2006 and based in Coral Springs, Rave Digital has a broad range of capabilities to harness when working to accomplish their customers' goals. Their portfolio ranges from educational and events apps to financial and security-focused apps.