

# Unintended Consequences:

How the “American Innovation and Choice Online Act” (S. 2992) Will Unwittingly Hurt America’s Independent Software Developers and Small App Publishers

Policy Analysis

Informed by the DCI App Developer and Publisher Working Group

January 2022

## Summary

The Data Catalyst Institute recently hosted a working group of independent software developers, small app publishers, and other small businesses working in the app ecosystem. The purpose was to discuss a Senate bill ([S. 2992](#)) and its potential effects on millions of developers and hundreds of thousands of app publishers that rely on the app ecosystem. The message from this group was clear – although S. 2992 may be well-intentioned, it would introduce several unintended consequences for millions of developers and hundreds of thousands of small app publishers. If S. 2992 is not helping these important stakeholders, who exactly is it helping?

Overall, three themes emerged from the working group discussions. One, while all developers and publishers have their own particular experiences with app stores and their regulations, they mostly see the value that the platforms provide them as app creators. For example, while a particular app publisher may not like some aspect of payments on the platform, they also recognize that some of those payments go toward keeping the platform a well-curated, generally safe and secure environment to do business in.

Two, developers and publishers largely don't view Congress as the right entity to solve these complex challenges, particularly using broadly written legislation. This is because the app ecosystem is young (one decade or so) and still being formed by market forces and existing regulations, and that Congress is not capable of understanding and anticipating the downstream effects of broad legislation. To the extent that Congress does write new legislation, it should be "surgical" - i.e., narrowly worded and targeted.

Three, developers and publishers see an information gap between their community and the policymaking community. There's no easy solution there, but quite possibly there is an opportunity to proactively connect these two groups together on a regular basis.

This working group report describes the thoughts of individual developers and small app publishers on these topics in more detail, and provides pointed quotations in their own words. It should serve as a guide to the voice of experts, practitioners, and small American businesses in this debate and related ones, which have not been adequately heard in Washington DC. To that end, DCI believes it would be valuable for Congress to listen to these important stakeholders before voting on S. 2992 or similar legislation, and to include such experts more in the earlier stages of crafting it in the first place.

# Background

Individual app developers and small app publishers (typically those with fewer than 20 employees) rely on integrated platforms like those provided by major technology companies such as Apple, Google, and Amazon to provide a variety of services and value-adds, including data security, payments, mapping, and advertising.

While regulation of the tech industry certainly warrants discussion, the unintended consequences of such regulation are equally as pressing. The Data Catalyst Institute (DCI) recently released an initial [analysis](#) of the American Innovation and Choice Online Act ([S. 2992](#)) that highlights the bill's unintended consequences for individual software developers, small app publishers, and related small businesses in the software development ecosystem. (This built on DCI's [earlier analysis](#) of similar House legislation.) In essence, over-regulation of these time- and cost-saving services will make the day-to-day operations of developers and publishers more complex and expensive.

Over time, this could also drive America's small businesses away from digital business - at the very time when they should be embracing it to stay competitive, as the Data Catalyst Institute (DCI) has demonstrated across its [Digitally Driven](#) series, a set of research reports on the relationship between U.S. small business competitiveness and use of digital tools. This is particularly true entering 2022, in the wake of shocks from the end of PPP loans, COVID-related and supply chain issues, and widespread inflation.

Whether well-intentioned or not, if some policymakers in Washington have their way, they will disrupt a successful app ecosystem that benefits millions of developers and app publishers and many other small businesses (app studios, design firms, etc.) that participate in this ecosystem. It is imperative that these policymakers seek out the perspectives, experiences, and ideas of individual developers and small app publishers (and don't know any lobbyists or pundits).

DCI conducted preliminary research on the disconnect between individual developers and national policymakers through a poll. Our unreleased snap poll results from a small sample of ~140 developers suggest that while many developers don't adequately follow policy debates about tech platforms and app stores, and while a majority is unwilling to engage with policymakers, a small subset is interested in both. The reluctance of many to get directly involved in policy conversations combined with a small group of "policy enthusiasts" is a situation stakeholders should understand better.

To that end, we convened a dozen subject matter experts to incorporate their perspectives and discuss regulation of the app ecosystem, the S. 2992 bill, and related topics. These experts were

individual software developers with experience working on apps, small app publishers, and other experts familiar with the app ecosystem. The focus of this working group was to substantiate our previous [analysis](#), consider different viewpoints, and develop original insights to communicate to lawmakers and other stakeholders in the overall debate.

## DCI App Developer and Publisher Working Group

The following participants, each of whom is an active participant in the U.S. app ecosystem, joined one of two discussion sessions under [Chatham House Rule](#):

- Adam Blacker, VP of Insights, [Apptopia](#)
- Adrian Garcia, CEO, [FynCom](#) (KarmaCall)
- Artur Pawelko, CBDO, [Sidepocket](#) and CRO, [Cyber Hornet](#)
- David Kopec, Assistant Professor, IT & Sciences, [Champlain College](#)
- Doug Adams, COO, [iFlipInvest](#)
- Jake Ward, CEO, [Data Protocol](#)
- Manton Reece, Founder, [Micro.blog](#) and Software Engineer, [Silverpine](#)
- Matt Bischoff, Partner, [Lickability](#)
- Matt Miller, Senior Security Software Architect, [FamGenix](#)
- Norman Ortiz, Founder & Head of Branding and Product Development, [iGenApps](#)
- Stacy Ekker, CEO, Tinuum LLC ([Doc2Doc Health](#))
- Tracey Zimmerman, CEO, [Robots & Pencils](#)

DCI's aforementioned [analysis](#) detailed the wide-ranging implications of S. 2992, including how app stores operate, how search results are integrated with maps or shopping suggestions, and how online stores position "house brands" in relation to other products. For individual developers in particular, the analysis notes, the bill would (1) increase complexity, time, and cost to make and publish apps and (2) increase difficulty for app developers to make and publish apps via changes to integrated services.

We heard our initial analysis validated from this group of individual developers and small app publishers, with one of them mentioning that "standards and regulations are very important, but removing integrations is a very dangerous road to follow." And while some in the group certainly think tech platforms need the right rules and regulations - and some in the past have been 'stung' by them - there was also a healthy distrust that Congress was the right group to fix the problem, with one group member saying, "There's a low barrier to entry with the App Store...I worry about

Congress regulating the industry to the point where it's made less accessible to small developers," and another bluntly stating, "I don't want [Sen.] Klobuchar and [Sen.] Grassley writing the rules without talking with developers."

Overall, three themes emerged from the working group discussions:

- While Their Specific Experiences With App Stores Differ, Developers and Publishers Mostly See the Value The Platforms Currently Provide Them
- Developers and Publishers Don't View Congress As the Right Entity To Solve These Complex Challenges, Particularly Using Broadly-Written Legislation
- Developers and Publishers See an Information Gap Between Their Community and Policymakers

We describe these in more detail below.

## While Their Specific Experiences With App Stores Differ, Developers and Publishers See the Value The Platforms Currently Provide Them

Many of our working group participants that work directly with the app stores have experienced both pleasure and pain, like any other small business working with any other very large business that acts as a supplier, wholesaler, shipper, or as a major partner of some kind. That said, very few of the developers in the working group, if any, think that the app stores are so unfair and beyond correction that Congress should order their immediate overhaul. One participant noted their preference for a more moderate approach rather than "the Elizabeth Warren view - you can either be with the platform or break up the entire platform."

### The value of app store ecosystems

Just as consumers might buy products from, say, Bloomingdale's or Target because they trust the curation of products and general quality a brand-name store like that contains, the Apple and Google app stores similarly provide an ecosystem with inherent value. "App stores are extremely

valuable. The perception of the quality of the app store is what people trust, so they're more likely to download from the app store - because these apps are forced to keep their security up-to-date," one participant noted.

By and large, developers and app publishers understand the tradeoff between an app store's rules they might not like (such as Apple and Google receiving a cut of payments processed through their platforms) and the benefits they receive from them. They also realize that if tech platform owners don't make enough money from hosting on their stores, that the platforms - at least in theory - might cease to exist at all, or in their current form.

One could argue that no matter how many app stores there are, there will always be a subset that are larger, better, and more dominant (i.e., those that compete better). There are hundreds of app stores in China, but about a dozen are recognized as being at the top. And what companies exactly will launch these new stores in the U.S. market? As one participant noted, "Lowering the incentive to run a store won't encourage more stores." And launching a store is expensive and risky. In 2010, tech giant Microsoft pushed its new Windows Phone ecosystem hard and had its own app store. After about five years, Microsoft stopped updating it. Now it's discontinued. (Microsoft's market cap exceeds two trillion dollars.)

## On payments and app stores

Of the roughly 2-2.5 million apps available for download in the app stores, about 97.5% don't pay anything to Apple or Google, in large part because these apps are not strictly oriented around driving revenue. Apps serve other purposes for businesses, such as extending their service, their brand, or their community. And other apps are hobbies or student projects or creative endeavors that young developers use to get noticed or hired.

The remaining ~2.5% of app businesses have a "partnership" with app store platforms. They do have payment fee considerations and valid application platform interface (API) concerns. From a competition standpoint, it is fair to ask for such businesses: Is it better for them to deal with two major app stores, or 10-20 smaller ones in a fragmented landscape? Is it better to have two major built-in audiences curated by the large tech companies, or to curate disaggregated users on your own?

For its part, S. 2992 encourages precisely the latter scenario of each of the questions above, because it would most certainly fragment the current app store ecosystem in the name of "increasing competition." Android, for example, currently offers developers a consistent and reliable set of APIs, but the proposed legislation could force Android to introduce more third-party APIs, increasing cost and complexity for developers.

## S. 2992 and app rankings on stores

Some experts have interpreted pending “self-preferencing” rules (essentially, a company preferencing its own products over others’) in S. 2992 as saying, in the extreme, that a platform owner couldn’t rank anything any more for fear of getting in trouble for doing so. If legislation did pass that muddies the waters and creates more legal risk for the major app stores, inhibiting their ability to provide accurate rankings, that might affect major apps like Apple’s Keynote or Google Docs. But what would the effects be on smaller apps?

While the group discussed disrupted search rankings and their possible effects, one participant noted, “If there is some other method of finding apps, what would it be?” Having no orderly process would:

- make it harder to find already-popular apps, because they would fall in the “rankings”
- complicate newer and increasingly popular apps climbing the rankings, because the “rankings” would no longer be in a sensible order
- disrupt the ability for app publishers to pay for ads that place them at the top of rankings, harming income for the platforms and marketing for the apps
- expose users to more knock-off apps and other security risks (e.g., if a publisher makes a knock off of Google Docs for the Android store, would Google kicking that knock off out of the Android store be self-preferencing in favor of Google Docs and open the company up to legal risk? It might be easier not to police anything, letting the ecosystem slowly degrade.).

This quote from a participant sums this situation up nicely: “Whether Congress will be able to find good legislation [on this issue] is completely beyond my interpretation.”

# Developers and Publishers Don't View Congress As the Right Entity To Solve These Complex Challenges, Particularly Using Broadly-Written Legislation

So, when is the right time for Congress to get involved in app stores and other platforms, the rules governing them, and their agreements with other private companies? While not necessarily using (or knowing) the legal terminology, participants tended to view issues through a “consumer welfare standard,” rather than a “competitor welfare standard” identified with the emergent “populist antitrust” movement.

## Intervene when many apps complain, not a few large ones

The participants are not generally aligned with Congress being so proactive with broad legislation that they're solving a problem that doesn't really exist, or is relatively rare. In one participant's view, “I think the right time for them to intervene is when consumers complain (like the FCC with spam calls). I don't think they should proactively intervene, otherwise you cut off people trying to do something creative in the economy and silo them. Let the private businesses do their thing, but intervene when consumers or businesses complain.”

Another participant mentioned that there were already laws in place to deal with challenges related to competition and antitrust, so if something wasn't particularly egregious, for everything “in the middle,” companies should be left to deal with on their own. To that end, there is a well-established body of antitrust/competition law on the books that is enforced every year; pending legislation such as S. 2992 is about overhauling such existing regulations.

## Developers and publishers worry a lot about Congress breaking things

Generally, the independent developer and small app publisher participants are fearful of Congress inadvertently breaking things that work well now, and that Congress does not necessarily understand all the ramifications and side effects of changes. For example:

- On search: “Everything I do is in iOS. I get fearful when I start to look at the competition. The bill [S. 2992] talks a lot about SEO and having regulatory control over that - it really got my wheels turning.”



- On reach: “You want the least amount of effort to reach the biggest amount of customers. Apple and Google - you wanna be there - that’s where you get the most eyes. Anyone going outside those stores, you have to be a big brand or you won’t make it.”
- On payments: On payments specifically, “Sideloaded - even if people do it - they didn’t make enough money (e.g., Fortnite). They came back to the App Store. Even if you do that to iOS, think about our family, friends, etc., “Who’s sideloading an app?”
- On user experience: “One thing you would lose is consistent user experience. Maybe a solution is something like contracts with default functionality - you need some type of default functionality, so users can have a consistent experience.”

To the extent that there are “happy medium” solutions to some of the problems that developers and publishers have with app stores, those have not been adequately discussed in the context of the pending legislation, which would, if passed, behave more like a sledgehammer than a scalpel.

For example, one participant pointed out the following: “I’m very skeptical about any large sweeping legislation like the bill in question...I worry about Congress regulating the industry to the point where it’s made less accessible to small developers. Sideloaded is cumbersome; if there were some precision legislation that lowers the barrier to entry (ex: you must have sideloaded and from a trusted site), I think that would go a lot further to increase competition than some sweeping legislation we won’t know the consequences of.”

### **Developers and small app publishers should have a voice in the policy debate**

Should tech-savvy people be more involved in not only debating, but even helping to craft actual legislation that would govern large technology platforms like app stores? Does Congress need something akin to the [U.S. Digital Service](#) that pairs small, agile teams of top technology talent (on short-term tours with the government) with problems across the Executive Branch?

There are several flavors of what this might look like. One participant mentioned, “It does have to be industry or technical people holding them accountable - you see when Congress tries to do stuff...by the time they put a regulation out there, everyone moves on. They need to refer to technologists and to try to do more of that specific regulation (especially before any rise of consumer complaints) there’s a delay.”

On the flip side, another participant who would have preferred to see more self-regulation and change from app store owners said, “Does Congress understand this well enough to write

legislation? No. But I don't think that this means we shouldn't try and shouldn't work with them. I'm in no way saying that 'Well these folks don't understand it so there's no point.'"

In the end, Congress would surely benefit from more conversations with the individual developers and small app publishers that write the code, design the apps, and work with the app stores for their livelihoods every day.

## Developers and Publishers See an Information Gap Between Their Community and Policymakers

For people who work on policy, regulatory, legal, and lobbying issues related to Washington DC, there is no shortage of relevant news sources. From established outlets such as C-SPAN, POLITICO, Roll Call, and The Hill, to new upstarts like Punchbowl, national cable television news like CNN, MSNBC, and Fox News Channel, and many smaller niche publications, there are many places to turn for news related to politics and public policy.

### Developers and publishers don't watch C-SPAN or read POLITICO

We learned that developers and app publishers rarely "tune in" to such news outlets. In fact, they don't regularly follow news coming out of Washington DC at all. A profession like software and application development tends to attract quantitative, data-driven, rigorous types of people, and in line with that, several noted the political or polarized nature - actual or perceived - of many such news sources. One participant commented, "I can't tell between agenda-pushing and facts." Another called many of the stories "soap opera issues" that inflate both the size of the problem from the government's point of view and the size of the reaction from major tech companies. Neither is particularly helpful to developers and publishers who base their decisions on facts, analysis, and risk.

We also learned that some developers and publishers read general business and news publications such as The Wall Street Journal, The Economist, The New York Times, and The Washington Post. That said, one participant did point out that such general news outlets, even in stories about technology, rarely include the voices of the types of people in the working group, telling us, "I think there's a different tilt in those sources, you're not hearing small developers getting interviewed. You're hearing how large tech firms are handling things."

## Not surprisingly, developers and publishers follow tech news most closely

More commonly, developers and publishers follow and are passionate about technology industry news sources such as [Hacker News](#), [Ars Technica](#), [The All-In Podcast](#), [This Week in Tech](#), and [Stratechery](#). They also scan curated platforms such as a company Slack, their personal Twitter account, or the popular site Reddit for industry updates. Still others working in finance or healthcare - highly regulated industries - also noted the extra effort required to stay on top of specific policies or regulations related to (say) the Securities and Exchange Commission (SEC) or the Department of Health and Human Services (HHS), in addition to those directly affecting technology platforms, apps, and related issues.

To the extent that they do follow news coming from Washington DC about app store policies (or other topics), many do so in a decidedly self-interested manner; in other words, they follow Washington DC news when they are actively seeking to launch a new app, a new feature, or otherwise doing something that temporarily intersects with the policies and regulations. Multiple participants noted that they are mostly reactive (sometimes too late) versus being proactive with such policy-related news.

## The gap between Washington DC and the developer and publisher community

We identified what appears to be a gap between news sources available to developers and app publishers, and the intelligence they really need to know to stay abreast of what's important to their livelihoods and small businesses. One participant commented, "I don't think I'm adequately serviced. I feel reactive...if I could get headlines on each of these issues or a risk assessment even on these things that would be helpful." This is also a group of people who are time-pressed professionally: "It's on me to go out and learn and nerd out. I really have to carve time out of my schedule and usually am pinged to do so - very reactive definitely - otherwise I have no time to be proactive on this - it's not what I get paid for."

Policy changes can have dramatic effects on these small app-based businesses and those businesses in development. A participant noted to the group that, "Every one of your businesses here relies on the assumption of how [tech platforms] work. If these assumptions change, all of a sudden, we might be out of business." But by and large, they don't believe that they have much of a voice or influence in Washington DC. One participant duly noted, "There is a conversation happening, but I feel like we don't have a lot of sway in them."

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## Conclusions

One working group participant summed everything up well when they noted that, “There are a lot of ways to solve the problems today with larger app stores and small developers - lawsuits, media coverage, public backlash, congressional regulation, etc. but the only way we get to good solutions is that developers need to be there and need to be in the room.”

While developers and app publishers are self-admittedly more often reactive rather than proactive to Washington DC’s debates, they are nevertheless worried that Congress doesn’t understand all of the issues at stake, the unintended consequences of their actions, and that they might break things that currently work well while trying to fix something that isn’t necessarily broken. To the extent that new laws are needed, they should be surgical, incremental, and targeted, in the view of many experts we talked to.

The bottom line is that S. 2992 would make it harder for developers and app publishers to create, publish, and market their original creations. The many potential negative side effects of S. 2992 - covered in more depth in [this DCI policy analysis](#) - are, put simply, bad for business.

## About Catalyst Research

### Data Changes Everything.

Catalyst Research solves problems from a different perspective. The intersection of technology, public policy and market trends today will define every aspect of society for the next century. It is against this backdrop that Catalyst Research seeks to better understand, elevate and mobilize the data that allows leaders to think creatively and advocate successfully for a sustainable, safer and more equitable future enabled by technology.

Our firm is organized around critically important practice areas including:

- The Digital Safety Net and Small Businesses
- Digital Innovation as a Threat and Opportunity
- The Microeconomics of the Digital Economy
- Digitally Driven National Competitiveness

We are not generalists, and we come with a formed opinion on these matters. At Catalyst Research, we believe that these topics should be commonly understood and easily accessible to leaders and those in a position to shape society's future.

To do this, we bring together the sharp and deeply sourced experts from across a wide array of topic areas and perspectives, enabling the Catalyst Research team to create engaging conversations, unique insights and relatable stories and publications which can be found on [www.catalystresearch.com](http://www.catalystresearch.com) and our sister organization the Data Catalyst Institute [www.datacatalyst.org](http://www.datacatalyst.org).