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Protecting American Innovation by Establishing and Enforcing Strong Digital Trade Rules

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Chairman Smith, Ranking Member Neal, Chairman Smith, Ranking Member Blumenauer, and members of the Subcommittee, thank you for the opportunity to speak today. My name is Olivia Walch, and I am the CEO and founder of Arcascope, a Virginia-based company that makes software to help people sleep better by targeting their circadian rhythms. If you've ever had jet lag, worked a night shift, or simply woken up in the middle of the night and not known why, you've experienced the tremendous impact circadian rhythms can have on your sleep, health, and overall wellbeing. Arcascope's apps work by telling our users what they need to do—through personalized plans for timing their eating, light exposure, and caffeine—to start sleeping and feeling better, faster.

I first started making apps while working on my PhD in Applied Mathematics at the University of Michigan. At the time, I was borrowing a school computer and coding at the kitchen table of the apartment I shared with three roommates. While learning to code in Objective C was miserable and the chairs weren't comfortable, the act of making something and being able to share it with the world from a kitchen table was incredible. I've been addicted to that feeling ever since. It's what led me to apply for Small Business Innovation Research (SBIR) grants from the National Institutes of Health after I graduated, and it's what drove me to raise $3M in angel and venture funding after we leveraged our SBIR funds to run a successful clinical trial showing efficacy of our technology.

I still work at a kitchen table, even though I have a much more comfortable chair these days. Arcascope now employs six people, remotely distributed across the U.S. In the time since our founding, we've had success helping users sleep better all across the United States.

But our users are not *just* from the United States.

It's for that reason that I greatly appreciate the opportunity to share our perspective on digital trade, data flows, and the eCommerce moratorium today.

Operating globally as a small business

Arcascope has users from countries around the world. Like most small companies, we reach these users through an infrastructure of service providers—for distribution, subscription processing, authentication and analytics—that each handle user data. The services range from as critical as handling how users login to as simple as tracking which buttons they click. We've invested time, effort, and energy into engineering our backend to carefully handle this data.

We can't afford to constantly re-engineer this backend or consult our lawyer in response to policy changes requiring us to store data locally or pay country-specific tariffs— we lack the resources. After all, two weeks of our lawyer's time is half an engineer's salary. If we were in a position where the choice was redoing our backend or leaving the country whose specific rules were presenting a compliance challenge, we would almost certainly just stop operating in that country.

Of course, you can probably see the problem this poses for a jet lag app. No one wants to use a jet lag tool that works when you take off from Dulles but doesn't when you land in Delhi.

We already limit the data we collect, even though it would be useful, to avoid compliance headaches in places like India. If you step off the plane in Delhi, and our app is telling you to avoid caffeine after 8:45 am, you might wonder why. But we can't explain to you why the app is saying that unless you go to settings, export a diagnostic report for us, and email it in—a hassle for all involved—and caused by the disparate regulations we encounter around the globe.

If the fracturing of digital trade is allowed to continue, established third party providers will sell us compliance, for a price—passing their compliance costs on to us—and further entrenching the already-big players in the technology space. After all, compliance with countless, nation-specific digital trade rules takes a lot of lawyers, and there aren't that many companies with legal resources on the scale of Amazon, Meta, and Google.

Sharing information is not like shipping shoes

Digital goods are, essentially, information, which makes them inherently different from trade in physical goods like shoes. Existing frameworks like the WTO eCommerce moratorium recognize that electronically transmitting information shouldn't be taxed.

Imagine that I'm on the phone with a friend in Indonesia, helping her overcome her jet lag. I factor in when she slept last, her light exposure, and her recent activity, to tell her what she should do during the day to feel better faster.

It's a phone call, so there are no digital goods, and there wouldn't be any digital tariffs involved.

But what if I sent an audio file of myself saying the same information? Or put it in a PDF? Or what if, instead of *me* telling her what to do, I used an algorithm trained on the kind of advice I typically give to create the recommendations? And what if I accessed that algorithm via an app?

Or, to really drive this point home: what if I took the binary source for that app and read the ones and zeros out loud to my friend over the phone, so she could recreate the entire app from scratch on her own computer? (This would take a long time, and hopefully she'd be over her jet lag by the time we finished, but the point still stands).

In each one of these cases, the *information* being shared is identical, but the tariff implications could be wildly different if digital transmissions could be taxed. Information should not be subject to tariffs in some forms but not others.

The small business owner in me is grateful that, thanks to the WTO eCommerce moratorium in place right now, digital goods *are not* subject to tariffs in the same way as physical goods. It's from this place of gratitude that I call for strong U.S. leadership to continue the moratorium and ultimately make it permanent.

Data flows foster innovation

It's easy to see how the imposition of localization requirements would be stifling to products like our jet lag app. But almost any business would be disrupted by barriers to cross-border data flows. And despite the tendency to think of tech as nice-to-haves, like social media or streaming services, data flows can be critical and life-sustaining.

My company's ambitions are much larger than helping people feel better after an international trip. We're the first mover in the field of commercial chronomedicine, or circadian medicine—helping people time drugs in ways that are personalized to them so that the drugs are more effective and less toxic. Researchers around the world have seen staggering results, including the finding that certain drugs can cause tumors to shrink when given at some times and grow at an accelerated rate when given at other times. In other words, timing your drug wrong could be worse than not even taking it at all.

My company and I are working with researchers around the world—in Korea, Italy, the United Kingdom, Germany. We need to be able to share data with each other. Innovation will happen fastest if barriers to data flows across borders are kept as frictionless as possible. There are good reasons for slowdowns in sharing of health data to occur, like rigorous human subjects and privacy protections. Nation-specific trade bureaucracy is not one of them.

Sharing source code is a non-starter

As a start-up, putting our proprietary innovations at risk is putting our entire company at risk. Requirements to share source code as part of operating in a country would mean exposing our "secret sauce" to foreign regulators that probably do not have our interests—or U.S. interests—in mind. Undermining our business and our competitiveness in that way is not a risk we can afford. Again, our only option would be to stop operating in that country.

That does not mean innovation in circadian timing won't happen there. It means a non-U.S. competitor or someone better-funded and with more legal resources will beat us to it.

Conclusions

U.S. small businesses like mine need strong leadership to prevent rules like tariffs on digital goods, mandatory data localization, or forced source code disclosure from hampering our global growth.

My company originated in a first-floor apartment about 500 feet from Michigan Stadium. I was able to grow my company thanks to SBIR funding, access to top-level talent, and an unparalleled innovation ecosystem. The United States is the best place in the world for small tech. But my company cannot invest resources to retool our product for a fractured trade environment in the same way that larger companies can.

Without proactive digital trade leadership from the United States, the already entrenched players will become more entrenched and global markets that U.S. startups like mine can reach will become smaller. With strong leadership on digital trade from the United States, companies like Arcascope can continue to do what we do best—build—and compete on a global stage. And we can continue to help you avoid jet lag on your next Congressional Delegation.

Thank you for the opportunity to speak today, and I look forward to your questions.