



ITI Testimony Regarding Global Digital Trade

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The Information Technology Industry Council (ITI), the global voice of the technology sector, appreciates the opportunity to provide testimony to the USITC investigations on global digital trade.

ITI is the premier voice, advocate, and thought leader for the global technology industry. Our member companies include the world's leading innovation companies, with headquarters worldwide and value chains distributed around the globe. We advocate on behalf of our members for policy and regulatory environments that enable innovation and maximize the benefits that technology companies provide, including economic growth, job creation, and the tools to solve the world's most pressing social, economic, and environmental challenges. We work closely with our partners in government, international organizations, the business community, and civil society to achieve these objectives. This spirit of cooperation and partnership underlies the sentiments we offer in respect to this testimony.

Overview

The most important message we would like to convey to you is that the Internet – and digital technologies broadly – are fundamental to the international competitiveness and success of U.S. companies in all sectors and of all sizes. Digital trade is not just a tech sector issue, it's a whole of economy issue, and will only grow in significance as more companies use digital technologies to access markets, interface with customers, and innovate.

The tech sector is critical for creating high-quality jobs for American workers, including in manufacturing and other sectors. Technology companies directly [employ](#) over 6.7 million Americans—5.7 percent of private sector employment—and account for 7.1 percent of U.S. GDP. Technology products and services, however, have a much larger reach and play a strong role in the remaining 92.9 percent of U.S. GDP. Technology products and services drive growth and job creation in virtually every sector of the economy, allowing our manufacturers, automakers, energy firms, construction firms, and other U.S. industries to be more competitive, at home and abroad. U.S. manufacturers of automobiles and aircraft depend on technology products and services to lower the cost of production and improve product performance and safety, and U.S. small businesses of all types leverage U.S. technology platforms to reach new customers in foreign markets – an impossible feat only a decade ago. In addition, U.S. competitiveness and jobs in all sectors now depend on companies being able to move digital information rapidly and freely across borders to support their businesses and reach customers in foreign markets.



Just as opportunities for digital trade support U.S. competitiveness, job creation, and economic growth, barriers to digital trade threaten them. Our companies have been experiencing a worrying trend of governments around the world adopting measures that interfere with the movement of data across borders, discriminate against U.S. firms, and, as a result, undermine U.S. economic interests.

For the purposes of this testimony, we would like to focus on the effects of the following five barriers: 1) requirements to localize computing facilities and the storage, processing, or otherwise handling of data; 2) restrictions on cross-border data flows; 3) mandates that companies disclose their proprietary source code and algorithms as a condition for market access; and, 4) the extension of telecommunications and broadcasting regulatory requirements to online services.

The Effects of Barriers to Digital Trade

REQUIREMENTS TO LOCALIZE COMPUTING FACILITIES

One of the most significant barriers to digital trade is a requirement to localize computing facilities for the storage, processing, or otherwise handling of data – what we call “data localization.” We have seen an exponential rise in this type of barrier, but the most pernicious examples can be found in China, Indonesia, Nigeria, Russia, Turkey, and Vietnam. The economic impact of these measures is clear: data localization requirements increase data handling costs of companies by 30-to-60 percent, according to a 2015 [study](#) by the Leviathan Security Group. The European Center for International Political Economy (ECIPE) [estimates](#) that these measures also detract from GDP growth, productivity, and competitiveness in the economies implementing them.

What this means for U.S. companies doing business in these markets is prohibitively high new costs to supplying services and conducting normal business operations. The internet has dramatically reduced costs not only because of its power to connect, but also because of its ability to create unprecedented economies of scale for data storage and processing. Companies choose to place their data centers based, among many things, on the ability of their facilities to reach multiple networks easily at low cost. It is for this reason that many companies choose to place their facilities near high-traffic internet exchange points (IXPs), such as the one found in Northern Virginia. Many companies can serve all of their global operations from just one such facility. Data localization requirements, however, break apart these economies of scale, reducing employment in data centers in the U.S., raising costs for companies, and ultimately reducing their effectiveness in global markets. These effects are especially detrimental for American small and medium sized enterprises (SMEs) that rely on cheap data management services and scalable solutions to bring innovative services to international markets.

In addition to higher costs, data localization requirements can create market access barriers due to insufficient infrastructure to properly serve American companies. High quality data centers connected to high speed internet services are essential for globally competitive companies, and though some companies with sufficient resources may be able to overcome these challenges, many cannot. For example: some countries have data localization requirements but do not have reliable sources of electricity. In these cases, when the power goes out and a company has their services hosted only on a local server, that company’s business is inoperable until the power returns. For small companies, these periods of blackout can be devastating, and their exporting potential greatly limited.



Lastly, data localization requirements can expose companies to greater security risks. In instances where companies do not have direct control over their data due to a data localization requirement, they could be more vulnerable to hacks from bad actors, both governmental and private, and could be putting their proprietary trade secrets and the sensitive data of their customers at risk. Trust is essential for the success of technology companies, and as such they need to be able to exercise the highest level of protection of their information as possible across their entire network.

RESTRICTIONS ON CROSS-BORDER DATA FLOWS

A second, but related, barrier to digital trade is restrictions on the ability of companies to move their data over international borders. These barriers are also growing in frequency around the world and justified by through a variety of ways, including to protect the privacy of citizens, as can be found in Europe, or to protect national security, as can be found in China. The McKinsey Global Institute estimates that the international flow of data contributed 2.8 trillion U.S. dollars to the global economy in 2014, a figure that could reach 11 trillion U.S. dollars by 2025. These gains are at risk of never being realized if countries continue to break apart the internet by controlling where information can be transferred.

The reason that these measures are detrimental to U.S companies is simple: companies of all sizes are global. Internet, logistics, medical, and all other types of companies transfer data internationally both internally and externally to create value and compete effectively. SMEs in all industries rely on cross-border data flows to reach new markets to sell their products. Even the manufacturing sector relies heavily on international data flows. Manufacturing companies place their factories all over the world and tightly integrate them into global supply chains, transferring data between them daily to produce the exact right quantities at the exact right time to fulfill orders with limited inventory. The ability to transfer data internationally is fundamentally important to the success of these companies, creating jobs and growth domestically.

We do believe, however, that there are some situations in which rules on the international transfer of data are appropriate, but we advocate for any such restrictions to be narrow, the least trade restrictive possible, and designed to achieve a legitimate public policy objective. It is appropriate, for example, for governments to work to ensure national security and public safety, support economic growth and job creation, and protect people's privacy and personal information. The problem is that, even when they have the right motivations, governments are too often pursuing the wrong policies. In other cases, governments are using legitimate motivations as smokescreens for protectionist efforts to provide advantages to their own firms.

MANDATES TO DISCLOSE SOURCE CODE AND ALGORITHMS

The foundation of American global competitiveness is our ability to out-innovate foreign companies. This is no more true than in the tech sector, and it is the driving element behind the fact that five of the top ten largest companies in the world are consistently American technology companies. However, requirements to disclose source code and algorithms as a condition for market access threaten to erode the power of American innovation.



Our companies rely on protecting their secret, proprietary information to compete abroad. Their products and processes are driven by digital assets that are the result of countless iterations of research and development. For example: U.S. companies that deliver cutting edge search engines, data processing, and software do not publish the computer code behind these products – the code itself is what holds all of the value of the digital products. Some countries that require the disclosure of source code and algorithms can, and do, use that information to prop up their own national champions, allowing them to rapidly reduce their own innovation deficit and erode the market share of U.S. companies.

This issue will become increasingly important as artificial intelligence (AI) continues to be integrated into more and more U.S. products. American companies are investing billions of dollars into AI research in anticipation of the new opportunities in the marketplace that these technologies will bring. The companies that are able to create the most effective AI algorithms will be the ones that find the most success in the global market in future, potentially changing the way people work and live on a daily basis. However, if U.S. companies are forced to surrender their proprietary algorithms, the competitive advantage of U.S. companies at home and abroad will be reduced or even eliminated, equating to job losses and an economic slowdown at home.

EXTENSION OF TELECOM REQUIREMENTS TO ONLINE SERVICES

The proliferation of online services has revolutionized how citizens around the world work and communicate. The emergence of online services provided over traditional telecommunications networks – often referred to as “over the top” or “OTT” services – is driving growth, creating jobs, and advancing innovation in the global economy. Although there is not a single prevailing global definition of the term, OTT services can be defined as communications and content delivery services and applications that end users access using their own internet connections. U.S. companies have been at the forefront of creating OTT services that leverage the internet to create value for consumers, changing the way we communicate (video chat, internet-based chat services, etc.), consume entertainment (streaming video, internet radio, etc.), and more. Typically, providers of OTT services do not supply network access on their own to end users but rather rely on telecommunications services to deliver their products and services to consumers. These services are an increasingly important element of the broadband value chain and are diverse and fast evolving, providing solutions that were previously unavailable or unaffordable to many people and businesses. OTT services provide users, developers, and SMEs around the world with access to jobs, education, news, trading platforms, productivity tools, enterprise services, app stores, and entertainment choices that were unheard of just a decade ago.

Some countries have responded to this change by creating protectionist regulations that favor traditional telecom industries and national champions by requiring internet service providers to take steps like registering as telecom operators, obtaining telecom licenses, retaining data in particular ways, contributing to universal service funds, and having a local presence – rules that are often not reasonable or technically feasible for online services. Often, these measures act as market access barriers for innovative American companies, making it impossible for them to enter particular markets or forcing them to operate under legacy regulations that do not apply to the specific characteristics of their services, marketplace, or consumer behavior. This is often particularly harmful for SMEs that do not



have the financial or legal resources to comply with such requirements, effectively blocking them from exporting to select foreign markets.

CONCLUSION

ITI's member companies experience a wide-range of barriers to digital trade around the world that, taken as a whole, make the internet less global, less open, and reduce U.S. competitiveness. A globally competitive technology sector that benefits the U.S. economy, businesses, and workers depends on preventing, reducing and eliminating these barriers. These barriers are not unique to the tech sector. They affect every industry, as the line between tech and other sectors is increasingly less clear.

We appreciate the focus that the USITC continues to have on digital trade issues, and the diligence with which it is carrying out these investigations. We look forward to continuing the work with the USITC team and global industry to create a truly global digital economy that allows innovative U.S. companies to thrive.