



The  
Software  
Alliance

BSA

# Powering the Digital Economy

A TRADE AGENDA TO DRIVE GROWTH



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# Introduction

Global trade is going digital in the 21st century, propelled by more than \$2 trillion in annual spending on information technologies and services such as mobile and cloud computing, big data and analytics.<sup>1</sup> This trend has far-reaching significance, not just for the IT sector but for the world economy as a whole, as enterprises of all types and sizes capitalize on new ways of boosting productivity, streamlining operations, and facilitating creativity and problem solving, which in turn spurs job creation and growth.

The applications and knock-on benefits of this ongoing explosion in IT innovation are limitless. For example, with infinitely scalable processing power and unimaginably vast data storage at their disposal, banks can now analyze patterns in their transaction records to detect fraud; doctors can assess from historical outcomes the most effective courses of treatment for diseases; and manufacturers can spot the causes of production delays in global supply chains. The technologies also collapse distance as never before, allowing companies to operate seamlessly in international markets — interacting with suppliers and serving customers wherever they may be. This is the new, digitally enabled face of trade.

## DIGITAL PROTECTIONISM

While trade is rapidly evolving, trade rules have not kept up. So, as BSA documented in 2012, a new wave of digital protectionism has

been taking hold in many of the world's fastest-growing markets.<sup>2</sup> The phenomenon involves not just imposition of overt trade barriers, but also restrictions on the flow of commercial data across borders; nationalistic technology-certification and standards policies that distort international competition; favoritism for local IT products in government procurement; and widespread intellectual property infringement. These and other novel forms of IT-focused protectionism threaten to inhibit digital trade, stifle innovation and slow economic growth to the detriment of enterprises and customers around the world.

In the information age, any economy that wants to compete globally must have a multi-pronged digital agenda at the core of its growth and development strategy. It should include domestic investments in foundation areas such as education and skills training in science, technology, engineering and math, and development of IT

infrastructure through broadband deployment and other means. It also should include forward-looking policies to expand digital trade. This report focuses on the trade component.

## MODERNIZING TRADE RULES

There is precedent for navigating periods of change such as this in the trade arena. Policymakers stood at a similar inflection point in the 1980s when they recognized the keys to global trade in the coming decades would be intellectual property, services and foreign direct investment. With foresight and hard work, they updated trade rules in the Uruguay Round of multilateral negotiations to ensure disciplines were in place that would provide a check against protectionist impulses in those areas. Now, as governments pursue robust growth agendas for the digital economy, negotiators must modernize trade rules once again.

**“ Novel forms of IT-focused protectionism threaten to inhibit digital trade, stifle innovation and slow economic growth to the detriment of enterprises and customers around the world.**

There are at least three aspects to this challenge:

- First, we need to modernize trade rules to reflect the realities of digital commerce as it is being conducted today. This requires covering innovative services in trade agreements, keeping borders open to the free flow of data, and preventing mandates on where servers or other computing infrastructure must be located.
- Second, we need to promote the continued progress of technology innovation so we can capitalize on the opportunities of tomorrow. For this, a trade agenda must secure robust intellectual property protections and encourage the use of voluntary, market-led technology standards.
- Third, we must ensure there are level playing fields for all competitors so customers everywhere have access to the best products and services the world has to offer. Here, governments should lead by example. They should be fully transparent in their procurement practices and make decisions based on whether a product or service best meets the needs at hand and provides good value, rather than according its national origin. To achieve that outcome, they should open up public procurement to international vendors, and they should ensure state-owned enterprises don't have an unfair leg up on everyone else.

There are ambitious trade negotiations now underway that provide ideal platforms for such an agenda. In the Pacific region, a group of countries accounting for nearly 40 percent of global GDP and one-third of all trade are in discussions over a comprehensive pact known as the Trans-Pacific Partnership (TPP). In the Atlantic region, the United States and the European Union — which together make up half the world's output and a third of all trade — have launched talks toward a far-reaching agreement known as the Transatlantic Trade and Investment Partnership (TTIP). On a third track, more than 20 trading partners are working toward a Trade in Services Agreement (TISA) to bring down barriers on nearly two-thirds of global services trade. Finally, there have been ongoing negotiations to update the more than 70-country Information Technology Agreement (ITA) to eliminate tariffs on a wide array of new IT products.

Each of these negotiations is a significant undertaking that has the potential to break new ground in setting trade rules that can foster growth in the digital economy. This report first describes the opportunity that digital trade offers. It then identifies key barriers standing in the way and proposes a Digital Trade Agenda to ensure the world captures its full benefits.

# The Rapid Growth of Digital Trade

In 1995, the year the General Agreement on Trade in Services (GATS) went into effect, there were 16 million Internet users. Today, there are more than 2.7 billion. As we continue to increase our use of the Internet — to communicate, share information, consume media and conduct business — demand for international bandwidth has grown at an astounding annual rate of 49 percent.<sup>3</sup>

The scale of Internet usage also gives an indication of the scale at which digitally enabled services are being offered globally. They include not just IT-related services but also financial, insurance and other business services, plus many personal, cultural and recreational services, royalties and licensing fees. Together, exports of all these digitally enabled services from OECD countries alone approached \$1.6 trillion in 2011, according to the US International Trade Commission.<sup>4</sup>

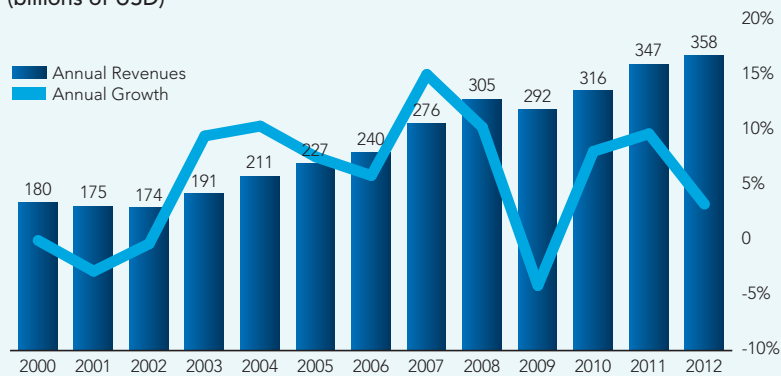
But to examine the challenge of fostering digital trade, the discussion here focuses on one especially important segment of activity — trade in IT products and services such as software, cloud computing and data analytics. They are vibrant drivers of the digital economy, both as sources of output, employment and trade, and as tools that bolster every other part of the economy.

The commercial software industry is at the innovative center of this picture. A well-established engine of economic growth worldwide, it has nearly doubled in size in just over a decade, generating revenues of nearly \$360 billion in 2012, up from \$180 billion in 2000. (See figure 1.) That represents a compounded annual growth rate of more than 6 percent, compared to global GDP growth averaging 2.5 percent.

Worldwide, more than 10 million people were employed in computer software and related services in 2010, according to the United Nations

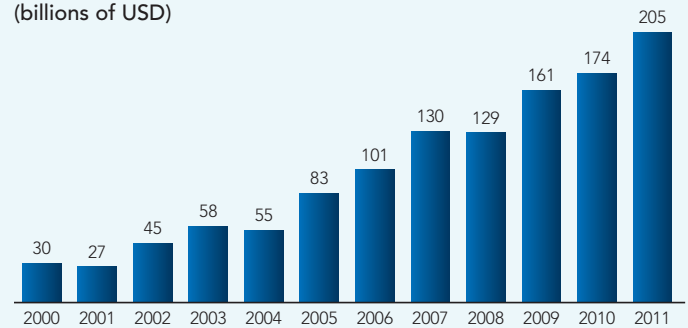
**“** The scale of Internet usage gives an indication of the scale at which digitally enabled services are being offered globally.

**Figure 1: Annual Revenues of Software Industry Worldwide, 2000–2012**  
(billions of USD)



Source: Economist Intelligence Unit and IDC

**Figure 2: Global Exports of Computer Services, 2000–2011**  
(billions of USD)



Source: World Trade Organization

Conference on Trade and Development,<sup>5</sup> and that number is growing rapidly. In the United States, for example, the software publishing industry is one of the country’s fastest-growing employers. The US Bureau of Labor Statistics projects software publishing jobs (not including software-related service jobs) will grow at an annual rate of 3.1 percent through 2020. So it comes as no surprise that over the same period the BLS also expects software to be America’s second-fastest-growing industry — with its output projected to grow almost 9 percent annually.

As it grows, software also is constantly evolving. Companies that pioneered applications for personal computers, servers and mobile devices are now branching into new technologies and services that are growing as explosively as

packaged software did in its early days. For example, the research firm IDC projects that worldwide spending on public IT cloud computing services will surge from \$40 billion in 2012 to \$100 billion in 2016 — a compounded growth rate of more than 26 percent. Similarly, IDC estimates the worldwide market for “big data” technology and services will grow at a compounded annual rate of 32 percent, with revenues reaching nearly \$24 billion in 2016.

Together, these digital products and services are transforming global trade. According to the World Trade Organization, exports of all computer services, including software, grew nearly sevenfold from \$30 billion in 2000 to more than \$200 billion in 2011. (See figure 2.) And while growing rapidly in absolute terms, software exports also have expanded by a factor of three as a share of global GDP.

Each of these figures is impressive in its own right. But because software, cloud computing and data services have become essential tools of production in the modern economy, their impact actually goes far beyond the IT sector, touching in one way or another a significant share of all economic activity.

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# Barriers to Digital Trade

Just as global trade in hard goods and traditional services has long been subject to protectionist barriers, a new wave of digital protectionism is slowing trade in products and services that are driven by information technology. These barriers take many forms, but they all have the effect of balkanizing the digital economy, creating inefficiencies and redundancies that diminish its potential. Some of the most pernicious examples follow.

## RESTRICTIONS ON CROSS-BORDER DATA FLOWS

A number of countries have adopted or are considering policies that would either significantly restrict the flow of data across their borders or require that data servers be located in their jurisdictions as a condition for serving their local markets. These types of restrictions undercut the enormous efficiencies of scale and economic benefits that come from digital distribution of services.

In the physical world, for example, the fastest or most cost-effective way to get a package of surgical implements from Portland to Miami might be through a distribution center in Calgary or Guadalajara. Requirements to use only US locations would cause unnecessary delays. With digital trade, that dynamic is even more pronounced. The network's defining feature is that it routes data as efficiently as possible.

Restrictions on cross-border data flows threaten that basic design.

Cloud computing is a great example of how digital trade can empower enterprises and consumers with productivity tools deployed across borders. While clouds can be located on premises or contained within a given jurisdiction, cloud computing often involves the storage and processing of data in multiple locations and even in multiple countries. Indeed, many of cloud computing's primary advantages — such as its reliability, resiliency, economies of scale, and 24-hour service support — can require that data be stored in multiple markets. Mandating that cloud service providers establish servers in every market where they do business will raise the costs for end users who look to the cloud as a cost-effective way to access highly scalable computing capabilities. Requiring enterprises that offer cloud services to confine data within a particular country also could prevent them from enhancing security by backing up data in multiple locations.

More generally, cross-border transfers of data have become critical to the core operations of both large and small enterprises. Companies need to share product designs, marketing plans, customer records, inventory data and other essential information between offices and among business partners in order to effectively manage their operations. Yet many countries are implementing policies that threaten this business model.



**Mandating that cloud service providers establish servers in every market where they do business will raise costs for end users.**

For example, a number of countries — including Argentina, Australia, Brazil, Canada, Chile, China, Colombia, Costa Rica, Greece, Hong Kong, India, Indonesia, Korea, Mexico, Peru, Russia, Switzerland and Vietnam — have adopted or have proposed rules that prohibit or significantly restrict companies from transferring personal information out of their respective domestic territories. The government of Indonesia has issued new e-commerce regulations requiring providers to register their services with a central authority and forcing some to establish local data centers. And in Vietnam, the Ministry of Information and Communication has issued a decree that would require providers of certain Internet-based services to locate at least one server in the country.

Frequently, such policies are put forward in the name of improving consumer privacy. A key challenge is addressing legitimate concerns while preventing countries from using unwarranted or overreaching policies that block cross-border trade in data-enabled services. Addressed properly, privacy laws and resulting government and company practices can facilitate digital trade by providing a foundation of trust for consumers that their data will be properly protected. At the other end of the spectrum are privacy laws that impose hard mandates on storing data locally, allowing no flexibility for cross-border data trade.

Privacy laws are also under review amid ongoing discussions of government access to data, an issue that has come to the fore in the wake of disclosures about surveillance activities by the US National Security Agency (NSA). But it should not be asserted that this is solely a US issue. All countries have surveillance programs. Their practices are an area of concern for the international community — and one that will not be addressed through commercial privacy policies. Instead, governments must work together to establish best practices for this realm. Discussions of intelligence law should not be used to undermine modern commerce.

Policymakers can ensure that their citizens and businesses are able take advantage of digital services by adopting privacy regimes that work together with those of other countries. For example, the current US-EU Safe Harbor framework has allowed thousands of businesses on both sides of the Atlantic to run their operations and provide services to consumers while protecting privacy. The EU is currently undertaking a review of its data privacy rules and the Safe Harbor. It will be important for policymakers to take a fair and balanced approach to reform in this area that enhances privacy and maintains vibrant transatlantic trade.

## PROCUREMENT DISCRIMINATION

Governments are among the biggest consumers of IT products and services. Yet many are imposing significant restrictions on foreign suppliers' ability to serve public-sector customers. When governments exclude foreign suppliers from procurement like this, the harms run in both directions — eliminating potential sales for suppliers and denying government purchasers the freedom to choose the best available products and services for their needs.

Brazil, for example, is moving forward with a program to provide price preferences as high as 25 percent when government procures software that is certified as locally developed and meeting certain local content requirements. India's Preferential Market Access (PMA) policy for government procurement of electronic goods



similarly establishes local content requirements that serve as a barrier to market access for foreign products. And China recently announced new software procurement rules that impose price controls and licensing terms for software, which favors domestic products over those offered by foreign companies.

While discrimination in government procurement is troubling enough, some countries are looking to extend such policies to procurement by state-owned enterprises or other firms under government influence. For example, India's PMA policy originally was intended to apply to certain licensees of the government, including telecommunications and financial services firms, in addition to government agencies themselves. Fortunately, this part of the policy has been rescinded.

## OVERREACHING SECURITY REGULATIONS

In the digital age, it goes without saying that every government must have a cybersecurity strategy. But it is becoming increasingly common for governments to use the pretense of "security" to impose de facto trade barriers. These may include restrictions on procurement of software and other IT products from foreign suppliers, or imposition of unreasonable testing or certification requirements. These measures not only create barriers to the sale of foreign IT products, but in practice deny local consumers and businesses access to products and services that may offer them the best solutions for their security needs.

China's Multi-Level Protection Scheme (MLPS) is an example. It mandates that only Chinese-owned information security and other IT products can be used in a broad array of information systems the Chinese government considers sensitive. Yet the policy takes a very broad view of what is sensitive, sweeping in most of China's large state-owned enterprises and government agencies in finance, transportation, telecommunications, health, education and many other areas not directly related to security. China committed in recent trade negotiations with the United States to revisit this policy but to date it remains in place.

In India, the government recently issued new requirements for safety, security-testing and certification of imported electronic products. This includes requirements that products be tested in designated labs in India, regardless of whether the products already have been tested and certified by internationally accredited labs. This imposes a burdensome and unwarranted requirement on foreign IT companies in particular. The government has temporarily postponed implementation of these requirements due to the significant concerns raised by global IT industry groups, but they could be put in place in 2014.

## NATIONALIZING TECHNOLOGY STANDARDS

Technology standards play a vital role in facilitating global trade in information technologies. When standards are developed through voluntary, industry-led processes and accepted across markets, they generate efficiencies and speed the development and distribution of new products and services. Yet there have been a number of instances in which governments have developed country-specific standards or have manipulated standards-setting processes to favor local companies and insulate them from foreign competition.

**“ Governments have developed country-specific standards or have manipulated standards-setting processes to favor local companies and insulate them from foreign competition. ”**

In China, for example, regulators have pressed domestic standards development organizations (SDOs) to adopt standards put forward by Chinese firms or implement patented technologies owned by these firms instead of more widely adopted international standards. China has adopted or sought to develop unique Internet protocols, 3G telecommunications services, wireless local area networks, digital audio and video, radio frequency identification technology and encryption,

# A WORLD OF OPPORTUNITY

A key indicator of the digital economy's growth potential is the proliferation of information and communications technologies (ICT), which now account for nearly \$3.7 trillion in annual spending globally. To capture the full benefit of this digitization, we need a comprehensive agenda to modernize outmoded trade rules in ways that enable electronic commerce, promote technology innovation and create level playing fields.

## BSA'S DIGITAL TRADE AGENDA

### 1 Modernize Trade Rules to Enable Digital Commerce

- Ensure data can flow across borders with few restrictions.
- Cover current and future innovative services.

### 2 Promote Technology Innovation

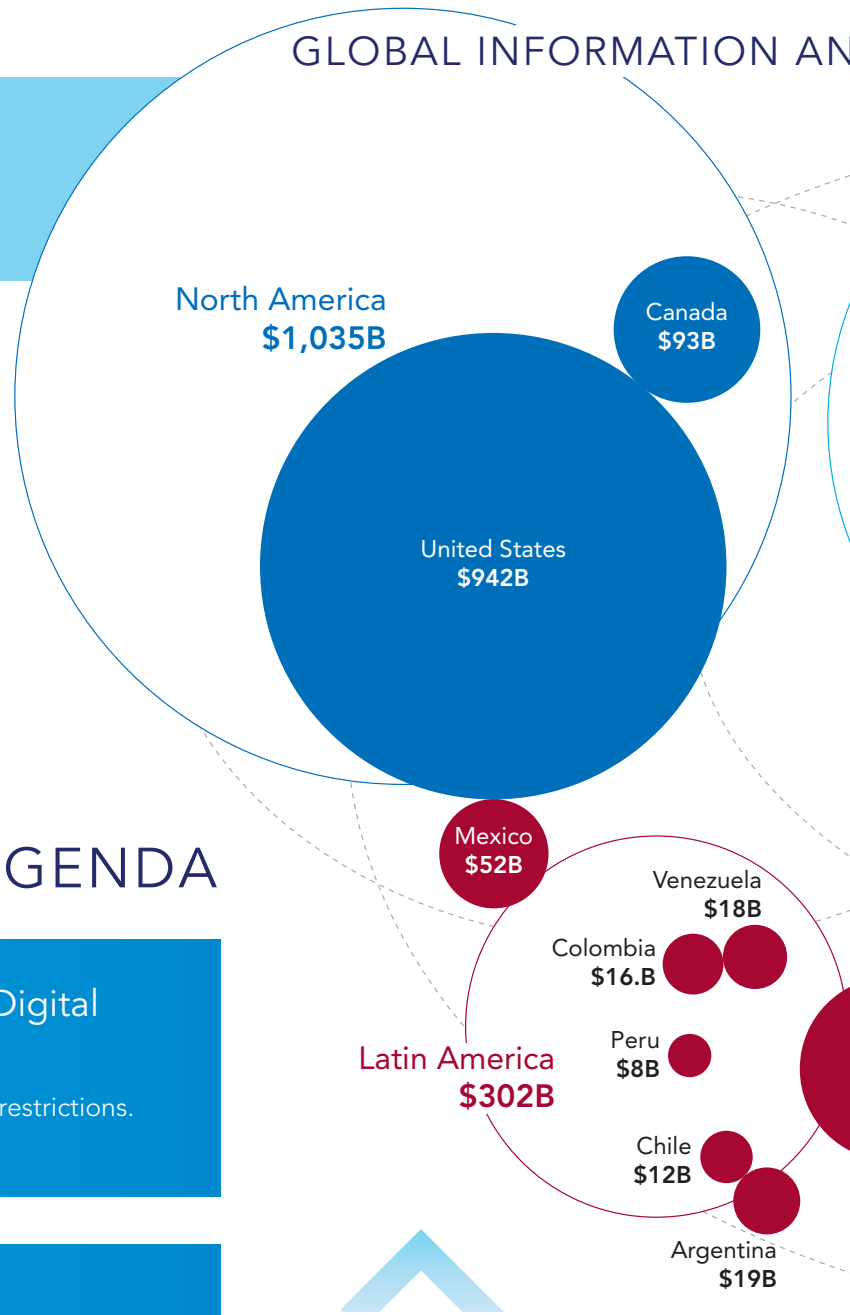
- Provide robust intellectual property protections.
- Promote market-led, globally adopted technology standards and minimally burdensome technical regulations.

### 3 Create Level Playing Fields

- Open up government procurement.
- Keep state-owned enterprises on a level playing field.
- Expand the Information Technology Agreement.

Details on page 11.

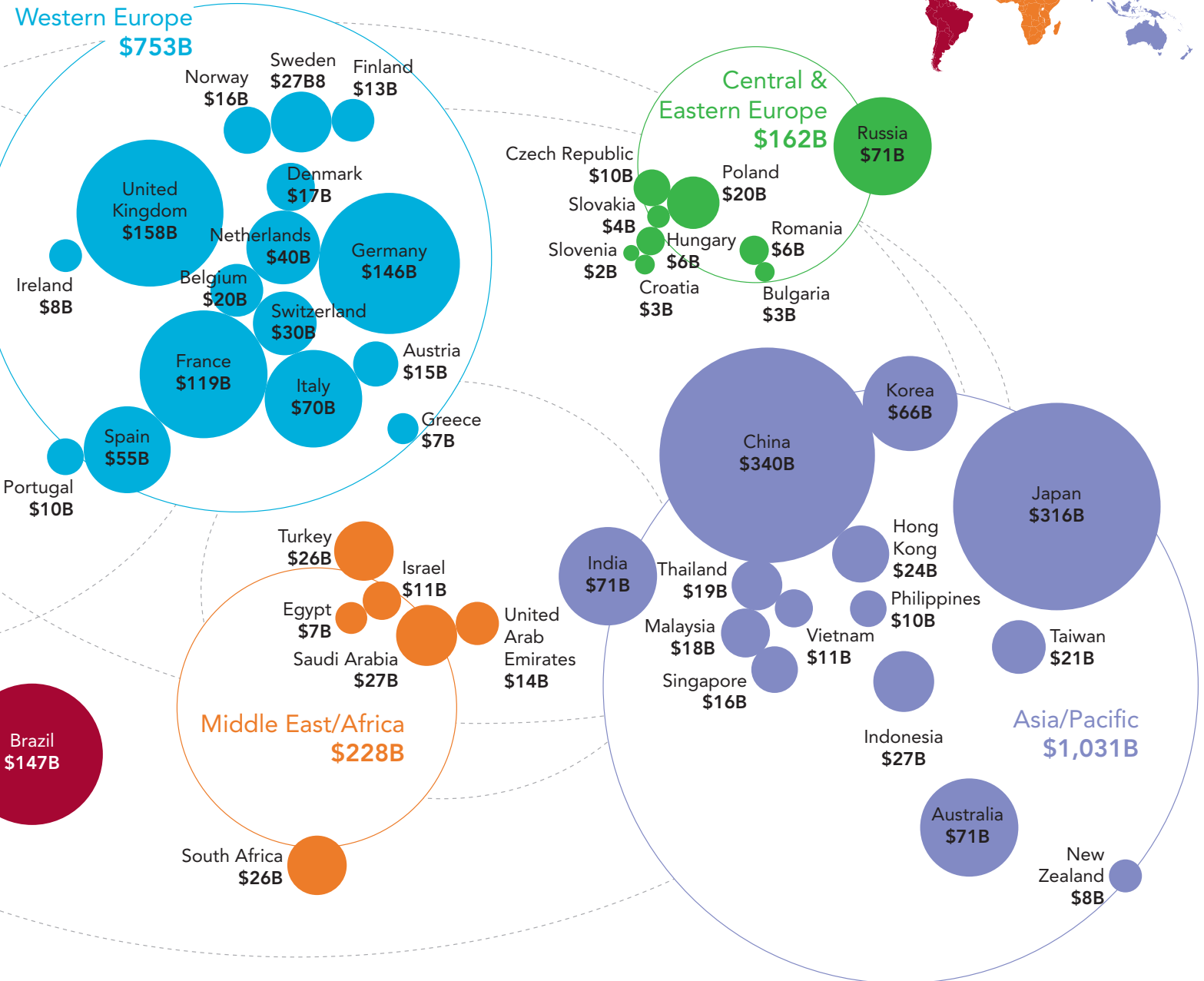
## GLOBAL INFORMATION AND COMMUNICATIONS TECHNOLOGIES (ICT) SPENDING IN 2012



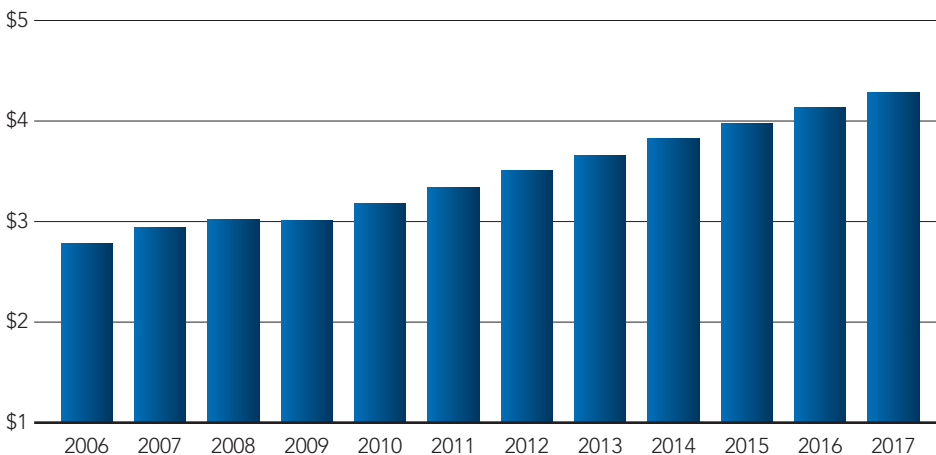
## ICT: An Engine of Growth

The map above shows the distribution of global ICT spending in 2012. It has been growing at a compounded annual rate of 3.4 percent, as shown in the chart on the right. Will the world capture maximum value from this investment? The answer depends on whether global trade rules facilitate or impede data-driven commerce.

# GLOBAL COMMUNICATIONS TECHNOLOGY SPENDING, 2012



Global ICT Spending Forecast, 2006–2017 (trillions of USD)



Data source: IDC Worldwide Black Book

among others. And Chinese SDOs often restrict meaningful foreign participation in standards-setting processes, which can make it difficult for non-Chinese entities to contribute to standards development or protect their patents.

## PERSISTENT TARIFFS ON IT PRODUCTS

The multilateral Information Technology Agreement (ITA), launched in 1996 under the auspices of the WTO, removed tariffs on a wide array of information and communications technology products. This has contributed to raising global trade in ICT products from \$1.2 trillion in 1996 to \$4 trillion in 2008.<sup>6</sup>

Yet in the years since the ITA came into effect, technology companies have introduced a broad array of products that are not adequately covered under the agreement, including new types of semiconductors, IT-enabled medical devices, and such computer accessories as monitors, speakers, DVD players, and video game consoles. Updating the ITA to better account for these advances could remove tariffs on more than \$800 billion worth of ICT trade globally.<sup>7</sup>

In addition, while more than 70 countries are members of the ITA, several big markets are not, including Brazil and Chile. The result is that many significant markets for IT products maintain tariffs that impede the growth of the digital economy.

## WIDESPREAD INTELLECTUAL PROPERTY INFRINGEMENT

In addition to the overt market barriers standing in the way of digital trade, there is also the ongoing problem of intellectual property infringement. For software, it is a rampant problem, particularly in the world's fastest-growing IT markets. For

example, the combined rate of unlicensed PC software use in the four "BRIC" markets — Brazil, Russia, India and China — was a staggering 70 percent in 2011, with the commercial value of that unlicensed software reaching nearly \$18 billion.<sup>8</sup>

Ineffective protection and enforcement of software intellectual property is a significant barrier to international companies' ability to sell and compete in key markets — and a huge security risk for end users, because when they use unlicensed software they do not always have access to critical patches and upgrades that can protect against viruses and other malware. Moreover, widespread use of unlicensed software hampers economic growth. According to a recent study conducted for BSA by the leading graduate business school INSEAD, global GDP could grow by \$53 billion for each 1 percent increase in the use of licensed over unlicensed software.<sup>9</sup>

In addition to license infringement, software and other IT companies increasingly suffer from theft of valuable trade secrets, such as confidential information on business processes, design or other critical data that gives a company and its products competitive advantage. Yet there are insufficient legal protections and remedies available to combat this in some markets. For example, many countries, including most EU member states, do not recognize trade secrets as a form of intellectual property. Instead, they protect trade secrets as a matter of contract law (applicable only if a contract exists between two parties) or under broadly worded tort and unfair competition laws in which civil remedies may vary significantly from case to case. Moreover, a number of major markets, such as Australia, Canada, the United Kingdom and Ireland, do not criminalize traditional trade secret theft. Other markets, such as Mexico, may have criminal penalties, but they are limited or their enforcement is very weak.

# BSA's Digital Trade Agenda

Fostering growth in the digital economy requires investing in fundamentals such as education, skills training and broadband infrastructure at the national level. It also requires governments to commit themselves to a trade-modernization effort that recognizes the transformative impact of information technologies and services such as mobile and cloud computing, big data and analytics.

Negotiations underway for the Trans-Pacific Partnership, the Transatlantic Trade and Investment Partnership, the Trade in Services Agreement, and the Information Technology Agreement together represent a critical opportunity to advance such a modernization effort. It is in that context that BSA offers the following recommendations — a program for liberalizing trade that will bolster the global IT sector, give enterprises large and small the tools to innovate and grow, and improve consumer access to products and services that enhance quality of life.

## 1 MODERNIZING TRADE RULES TO ENABLE DIGITAL COMMERCE

*Trade agreements should ensure data can flow across borders with few restrictions.*

The ability to transfer data across borders is critical for companies that provide or use digital products and services like cloud computing or data

analytics. Yet current global trade rules provide few protections to limit countries from imposing restrictions on cross-border data flows. So it is vital that trade rules include clear and enforceable obligations to: (1) allow trading partners to transfer, access, process or store data across borders, and (2) prohibit countries from requiring the use of local servers or other IT infrastructure as a precondition for accessing their markets.

Governments have legitimate policy objectives that affect data flows, including privacy, public safety and consumer protection, and there may be times when they determine it is necessary to implement measures that affect data flows. In those circumstances, governments should select the least trade-restrictive measures available. To that end, it is imperative that trade agreements include specific criteria for challenging a policy that unjustifiably discriminates against trading partners, is unnecessarily restrictive, or acts as a disguised barrier to trade.<sup>10</sup>

Finally, the flow of digital commerce should remain free of duties. Since 1998, WTO members have had short-term moratoriums on imposing customs duties on electronic transmissions. These moratoriums have been extended periodically through WTO ministerial declarations. To avoid the uncertainty that comes with short-term extensions and ensure duties do not become a barrier to digital trade, WTO members should make the moratorium permanent.

“ Current global trade rules provide few protections to limit countries from imposing restrictions on cross-border data flows.

*Trade agreements should cover current and future innovative services.*

The speed with which new technology service offerings are being developed and deployed is accelerating. Trade rules must be flexible and forward-looking to keep pace with these innovations. It is critical that services commitments in trade agreements be broad enough to cover both current and future technological advances. To achieve that goal, services commitments in trade agreements should be negotiated on a “negative list” basis that includes coverage of a particular service unless it has been specifically excluded by a party. This would allow trade agreements to keep pace with new technology service offerings without the need for frequent renegotiation.

Trade agreements utilizing a “positive list” for services should make clear that all new and future IT services fall within the broad GATS category of “Computer and Related Services” (which already includes, among other things, consulting services, software-related services, data-processing services, database services, Web and application-hosting services, and IT security services). Some work was done toward this end in 2007 when the United States, European Union, Japan and several other parties signed the Understanding on

Computer and Related Services, which called for an expansive approach to what was covered under this category. IT services also are encompassed in other parts of trade agreements, such as sections dealing with telecommunications and financial services. It is important that trade commitments to open markets in these areas are broad enough to cover IT services.

Further, trade agreements should include provisions ensuring non-discriminatory treatment for digital products and services. The method of delivery for a service should not affect whether it is afforded market access. For example, downloads of software and software updates have been common for some time and cloud computing is bringing software functionality to users over the Internet, while the actual copies of the software and data are stored on remote servers. From a trade standpoint, it should not matter whether consumers access software by purchasing a physical copy, downloading a copy over the Internet, or accessing a copy of software stored on a remote server.

## 2 PROMOTING TECHNOLOGY INNOVATION

*Trade agreements should provide robust intellectual property protections.*

Intellectual property theft undermines global trade in innovative products and services. Yet high rates of software license infringement remain all too common in many markets and theft of trade secrets is a growing problem.

Accordingly, trade agreements need to adopt best practices in intellectual property protection and enforcement. This includes providing strong civil and criminal enforcement mechanisms for both physical and online copyright infringement and effective measures for patent protection. Trade agreements also should include mechanisms to ensure governments lead by example and avoid using infringing products and services. For example, US trade agreements have long

included commitments requiring parties to ensure government entities use only legal software. New agreements should include similar provisions that build on these existing commitments. Finally, trade agreements should provide adequate civil and criminal remedies for trade secret theft that occurs through both traditional and digital means.

***Trade agreements should promote market-led, globally adopted technology standards and minimally burdensome technical regulations.***

Internationally recognized and adopted standards that are established through a voluntary, market-led process with industry participation and accepted across markets generate efficiencies and speed the development and distribution of new products and services, allowing consumers to get them faster and at lower cost. Government-mandated, country-specific standards, by contrast, tend to “freeze” innovation and force consumers and businesses into using products that might not best suit their needs. Trade agreements should include clear disciplines that require transparency and meaningful participation of industry in the standards-development process. They also should prevent trading partners from manipulating standards to block foreign competition or protect domestic industry sectors.

Technical regulations, especially specific technology mandates, can significantly impede innovation and create unnecessary barriers to trade, investment and economic efficiency. They also can promote the influence of vested interests seeking protection from competition, because they can affect both products and services themselves, and the way they are developed and manufactured. Moreover, technical regulations that are outdated or poorly designed can be inefficient to implement. Trade agreements should ensure that technical regulations for IT products and services are technology-neutral, reflect the lightest touch possible, and place the burden on governments to explain why other, less restrictive approaches could not be used.

### 3 CREATING LEVEL PLAYING FIELDS

***Trade agreements should open up government procurement.***

Governments around the world are among the largest purchasers of IT products and services. When they exclude foreign suppliers, it not only harms sales for those suppliers, but in many instances it denies government purchasers the ability to choose the best available products and services for their needs. So trade agreements should build on the WTO’s Government Procurement Agreement, which imposes important obligations on parties to open up their procurement markets.

Technology companies are especially concerned when government procurement policies restrict purchase options based on the underlying technology of products and services or whether they contain core intellectual property that is locally owned or developed. To combat this, trade agreements should expand on existing procurement trade rules and clearly prohibit measures that: (1) condition access to government procurement on the use of particular technologies or licensing models (for example, mandates for royalty-free use of open-source software over proprietary software), or (2) condition access to government procurement on a product or service having intellectual property that has been locally developed or registered.

In addition, as digital products and services become an increasingly important part of global trade, it is critical that procurement rules keep pace and clearly cover them. And finally, as noted above, governments have an opportunity to lead by example by implementing and enforcing policies to ensure they use only legal software and other non-infringing IT products and services in their operations.



Trade rules must be flexible and forward-looking to keep pace with innovation.

*Trade agreements should keep state-owned enterprises on a level playing field.*

In many countries, state-owned enterprises (SOEs) play an outsized role in the IT market, both as providers and consumers of IT products and services. It poses a significant challenge for foreign competitors when SOEs benefit from favorable treatment from the government, such as preferential financing, fewer regulatory burdens or preferred status as vendors to the government. In addition, there are instances where countries extend government procurement mandates and requirements to SOEs, limiting their purchasing decisions. Both scenarios can severely harm market opportunities for foreign software and other IT suppliers.

To address this, trade agreements should establish rules that put SOEs operating in the commercial sphere on the same level as private sector competitors. This includes ensuring SOEs operate in a transparent manner and conduct their activities consistent with the country's trade commitments for commercial entities.

*Negotiators should expand the Information Technology Agreement.*

The ITA has provided enormous benefits to the global economy by reducing tariffs on IT products in many developed and emerging markets, but it has not been updated in more than 15 years. With the rapid growth of new technologies, the ITA is in dire need of updating, both to cover a broad range of additional hardware, software and other IT products, and to cover major markets that are not currently members of the agreement, such as Brazil and Chile.

Negotiations to expand the agreement began in 2012 and are ongoing. It is important for the end result to be an ambitious agreement that covers a broad array of products in today's IT market.



# About BSA

BSA | The Software Alliance ([www.bsa.org](http://www.bsa.org)) is the leading global advocate for the global software industry before governments and in the international marketplace. Its members are among the world's most innovative companies, creating software solutions that spark the economy and improve modern life. With headquarters in Washington, DC and operations in more than 60 countries around the world, BSA pioneers compliance programs that promote legal software use and advocates for public policies that foster technology innovation and drive growth in the digital economy.

## ENDNOTES

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- <sup>7</sup> *ibid*
- <sup>8</sup> BSA, "Shadow Market: 2011 BSA Global Software Piracy Study," May 2012, <http://www.bsa.org/globalstudy>.
- <sup>9</sup> BSA and INSEAD, "Competitive Advantage: The Economic Impact of Properly Licensed Software," May 2013, <http://www.bsa.org/softwarevalue>.
- <sup>10</sup> The General Exceptions under Article XIV of the General Agreement on Trade in Services is an example of trade provisions providing such criteria to challenge overreaching regulation.





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