



19 October 2022

## **BSA COMMENTS ON INDO-PACIFIC ECONOMIC FRAMEWORK NEGOTIATIONS**

### **Submitted Electronically to the Ministry of Trade and Industry**

BSA | The Software Alliance (**BSA**)<sup>1</sup> welcomes the opportunity to provide inputs to Singapore's Ministry of Trade and Industry (**MTI**) on the Indo-Pacific Economic Framework (**IPEF**) negotiations.

BSA is the leading advocate for the global software industry before governments and in the international marketplace. BSA members are at the forefront of data-driven innovation that is fueling global economic growth, including cutting-edge advancements in artificial intelligence (**AI**), machine learning, cloud-based analytics, and the Internet of Things.

**This submission will focus specifically on the digital trade component of IPEF's Trade Pillar.** In this regard, BSA appreciates Singapore's leadership in advancing regional and global frameworks for digital trade and cross-border movement of data. BSA also recognises that the IPEF, unlike a traditional Free Trade Agreement (**FTA**), is intended to establish a new style of trade architecture, covering modern trade rules as well as specific regional projects and initiatives, including joint public-private activities.

In our view, the IPEF negotiations are an opportunity for Singapore to maintain the high digital trade standards set forth in its recent agreements, such as the Singapore-Australia Digital Economy Agreement (**SADEA**), Korea-Singapore Digital Partnership Agreement (**KSDPA**) and UK-Singapore Digital Economy Agreement (**UKSDEA**), while also leading Government-to-Government (**G2G**) and Government-to-Business (**G2B**) projects that would bring tangible benefits to businesses. Accordingly, our submission covers the following points:

1. Baseline digital trade provisions to be negotiated;
2. "Early harvest" of cross-border data commitments; and
3. Pilot projects and initiatives under the digital trade framework.

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<sup>1</sup> BSA's members include: Adobe, Alteryx, Altium, Amazon Web Services, Atlassian, Autodesk, Bentley Systems, Box, Cisco, CNC/Mastercam, CrowdStrike, Dassault, Databricks, DocuSign, Dropbox, Graphisoft, IBM, Informatica, Intel, Kyndryl, MathWorks, Microsoft, Nikon, Okta, Oracle, Prokon, PTC, Rockwell, Salesforce, SAP, ServiceNow, Shopify Inc., Siemens Industry Software Inc., Splunk, Trend Micro, Trimble Solutions Corporation, TriNet, Twilio, Unity Technologies, Inc., Workday, Zendesk, and Zoom Video Communications, Inc.

## Baseline digital trade provisions

**BSA urges Singapore to work with like-minded partners in the IPEF, including Australia, Japan, Korea, New Zealand, and the United States to push for a set of “baseline” digital trade provisions to be negotiated.**

The Ministerial Text for the IPEF Trade Pillar<sup>2</sup> (**Ministerial Text**) sets the foundation for the provisions to be negotiated in the Trade Pillar. On this, BSA notes that the IPEF countries have agreed to “advancing inclusive digital trade by building an environment of trust and confidence in the digital economy; enhancing access to online information and use of the Internet; facilitating digital trade; addressing discriminatory practices; and advancing resilient and secure digital infrastructure and platforms.” IPEF countries have also committed to “work to promote and support, inter alia: (1) trusted and secure cross-border data flows; (2) inclusive, sustainable growth of the digital economy; and (3) the responsible development and use of emerging technologies.”

**Guided by the Ministerial Text, Singapore should work with its like-minded partners in the IPEF to develop a set of “baseline” digital trade provisions as a basis for the negotiations. In this regard, we have set out a list of “baseline” digital trade provisions which should be negotiated.** They are divided into three categories: 1) provisions that enable open but secure movement of data and information between countries; 2) provisions that facilitate the process of digital trade; and 3) provisions that build trust in digital systems and the online environment. Most, if not all, of these provisions are present in prior agreements among IPEF countries.<sup>3</sup>

### 1. Provisions that enable open but secure movement of data and information between countries

- Cross-Border Transfer of Information by Electronic Means: Parties should not prohibit or restrict the cross-border transfer of information, including personal information, by electronic means if this activity is for the conduct of the business.
- Location of Computing Facilities: Parties should not impose requirements to use or locate computing facilities in their own territory as a condition for conducting business.
- Custom Duties: Parties should not impose customs duties on electronic transmissions.
- Personal Data Protection: Parties should commit to adopting or maintaining a framework that protects the personal data of those engaged in electronic commerce, while also striving to build interoperability between their respective protection frameworks.

### 2. Provisions that facilitate the process of digital trade

- Non-Discriminatory Treatment of Digital Products: Parties should not accord less favorable treatment to a digital product created or produced by other parties than it accords to other like digital products.

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<sup>2</sup> Ministerial Text for Trade Pillar of the Indo-Pacific Economic Framework for Prosperity, September 2022, [https://ustr.gov/sites/default/files/2022-09/IPEF%20Pillar%201%20Ministerial%20Text%20\(Trade%20Pillar\)\\_FOR%20PUBLIC%20RELEASE%20\(1\).pdf](https://ustr.gov/sites/default/files/2022-09/IPEF%20Pillar%201%20Ministerial%20Text%20(Trade%20Pillar)_FOR%20PUBLIC%20RELEASE%20(1).pdf).

<sup>3</sup> Other than the SADEA and KSDPA, such agreements include the Comprehensive and Progressive Trans-Pacific Partnership (**CPTPP**), the Digital Economy Partnership Agreement (**DEPA**), the UK-Japan Economic Partnership Agreement, as well as the United States-Mexico-Canada Agreement (**USMCA**) and the US-Japan Digital Trade Agreement (**USJDTA**).

- Paperless Trading: Parties should make available and accept electronic versions of trade administration documents. Parties should also strive to establish or maintain a single window/platform facilitating the submission of such documents and other relevant exchange of data.
- International Standards for Digital Services. Governments should support voluntary, internationally recognized standards, and should refrain from imposing conflicting national standards on digital services and emerging technologies.
- Digital Skilling: Parties should work on creating an ecosystem that will enhance digital literacy and skilling to ensure faster adoption of digital trade practices.

### 3. Provisions that build trust in digital systems and the online environment

- Online Consumer Protection: Parties should adopt or maintain laws that guard consumers from fraudulent or misleading conduct, which might be more prevalent when engaging in online commercial activities.
- Forced Transfer of Technology: Parties should not impose requirements for businesses to transfer a particular technology, software source code, or other proprietary information as a condition for establishing or conducting business in its territory.
- Source Code Disclosure: Parties should not require the transfer of, or access to, source code of software owned by a person of the other Party, as a condition for the import, distribution, sale, or use of such software, or of products containing such software, in its territory.
- Protecting against Cybersecurity and AI-related Risks: Parties should promote cybersecurity and AI risk management frameworks based on internationally recognized standards and best practices.
- Digital Inclusion: Parties should work together to ensure that all people and businesses have what they need to participate in, contribute to, and benefit from the digital economy, so as to close the digital divide.

### “Early harvest” of cross-border data commitments

Of these baseline digital trade provisions to be negotiated, those relating to the transfer of data are the most critical for the efficacy and growth of the global digital economy. Binding rules on cross-border data transfers and localisation serve as an important bulwark against digital protectionism. **As such, the “early harvest” of these data-related provisions should be a priority in the digital trade negotiations.**

**Consistent with prior agreements, this “early harvest” should cover: 1) cross-border transfer of information by electronic means; 2) location of computing facilities; and 3) custom duties. There is widespread evidence of the benefits accrued from incorporating these commitments, which are set out in the Annex at the end of the submission.**

These commitments focus on the impact that data regulations may have on trade among IPEF countries, and do not prevent governments from enacting rules to promote data privacy, data security, or other policy goals. These commitments are also designed, as framed in the Ministerial Text, to accommodate “the rapidly evolving nature of digital technology” as well as “flexibilities to achieve public policy objectives, including protecting the rights and interests of our diverse communities.” This

is because the commitments focus on the cross-border impacts of data regulations – rather than their substantive privacy, security, or other legal aspects.

To address the cross-border impacts of any data regulations that involve incidental restrictions on data transfers,<sup>4</sup> we urge IPEF digital trade negotiators to clarify that such data regulations:

- Be necessary to achieve a legitimate public policy objective;<sup>5</sup>
- Not be applied in a manner that would result in arbitrary or unjustifiable discrimination or a disguised restriction on trade;<sup>6</sup>
- Not impose restrictions on transfers that are greater than required;<sup>7</sup>
- Not improperly discriminate among different economic sectors;<sup>8</sup>
- Not discriminate against other IPEF-based service providers by modifying conditions of competition by treating cross-border data transfers less favorably than domestic ones;<sup>9</sup>
- Be designed to be interoperable with other IPEF members' legal frameworks to the greatest extent possible;<sup>10</sup> and
- Be developed in a transparent and accountable manner.

The bulleted list above reflects longstanding tenets of international law and practice, namely: 1) the freedom to pursue necessary public policy objectives; 2) the renunciation of discrimination against non-national persons, products, services, or technologies; 3) the commitment to minimize trade-restrictive effects; and 4) due consideration for trading partner laws.<sup>11</sup>

## Pilot projects and initiatives

Beyond its rule-setting function, the IPEF provides an avenue for its parties to engage constructively with both other countries and the private sector, collaborating on G2G/G2B projects that would benefit

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<sup>4</sup> As connectivity and data have become integrated into every aspect of our lives, data-related regulation has become common in many areas: data privacy, cybersecurity, intellectual property, online health services – to name a few. Globally, the number of data regulations grew by over 800% between 1995 and 2015, and exceeds 250 today. See OECD, Trade and Cross-Border Data Flows, OECD Trade Policy Papers (2019), at: <https://www.oecd-ilibrary.org/docserver/b2023a47-en.pdf?expires=1636811939&id=id&accname=guest&checksum=4D81CCF1C6E59168A9C5AE0E43F3F9FB>

<sup>5</sup> See e.g., SADEA Art. 23(3).

<sup>6</sup> See e.g., SADEA Art. 23(3)(a).

<sup>7</sup> See e.g., SADEA Art. 23(3)(b).

<sup>8</sup> See e.g., SADEA Art. 25, which apply the obligations on data localisation to financial services.

<sup>9</sup> See e.g., USJDTA Art. 11.

<sup>10</sup> See e.g., SADEA Art. 17(7).

<sup>11</sup> In the WTO context, these tenets – which trace back to the 1947 General Agreement on Tariffs and Trade – now apply to all multilateral trade rules, including those relating to goods, services, investment, technical regulations, and customs procedures. In the same spirit, IPEF digital trade negotiators should explicitly extend these core tenets to trade rules relating to the cross-border movement of data.

both workers and businesses. The US-led IPEF Upskilling Initiative<sup>12</sup> is an early example of a G2B project under the IPEF that would yield tangible benefits for workers and businesses in emerging economies.

**The Ministerial Text should guide the development of G2G and G2B projects, as it sets out the negotiating objectives. Our suggestions on possible projects and initiatives include the following:**

- Working on data-driven innovation and collaborations, such as data sharing projects and regulatory sandboxes;
- Promote the development and use of internationally-recognised standards in the fields of cross-border data transfers, cyber and data security, and AI;
- Agree on norms or best practices for the ethical use of AI and for AI risk management and co-create frameworks and guidance materials with industry on risk management tools and processes (e.g., how to conduct AI impact assessments);
- Explore the use of emerging technologies, such as blockchain and AI, to detect and combat forced labor practices in supply chains;
- Promote digitally-focused development assistance activities and “earn-as-you-learn” programmes to help workers seize new opportunities in the digital economy;
- Collaborate on the use of digital technologies, including big data analytics, cloud, AI, and the Internet of Things, to reduce greenhouse gas emissions; and
- Establish an annual or biannual public forum, where workshops and discussions can be conducted to share best practices and build capacity.

## Conclusion

We hope that our comments will assist MTI in the ongoing IPEF negotiations. **BSA would welcome the opportunity to engage with MTI staff to discuss your priorities and approach to the negotiations, and would be happy to follow up with the relevant staff on such a meeting.** Please do not hesitate to reach out to us if you have any questions or comments.

Sincerely,



Tham Shen Hong  
Manager, Policy – APAC

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<sup>12</sup> Launched by the US on September 8, the IPEF Upskilling Initiative is a public-private endeavour to support sustainable and inclusive economic growth by providing primarily women and girls in IPEF emerging economies and middle-income partners access to training and education in digital skills. Initial countries taking part in the Initiative include Brunei, Fiji, India, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam. Many BSA members – AWS, Cisco, IBM, Microsoft, and Salesforce – are partnering the US in this initiative.

## **Annex: Evidentiary Support for IPEF Cross-Border Data Commitments**

To deliver on IPEF's promise of shared Indo-Pacific prosperity and economic opportunity, it is critical that the IPEF contain cross-border data commitments that can help all Parties benefit from cross-border access to information, knowledge, and digital tools. There is widespread evidence of these benefits, some of which is summarized below.

**Data Transfers & Economic Growth:** Cross-border data transfers — valued in the trillions of dollars<sup>13</sup> — benefit regional economic growth. The World Bank's 2020 *World Development Report* found that, "[c]ountries would gain on average about 4.5 percent in productivity if they removed their restrictive data policies, whereas the benefits of reducing data restrictions on trade in services would on average be about 5 percent."<sup>14</sup> Local enterprises rely on data flows to drive quality, reach international customers, achieve economies of scale, and improve output,<sup>15</sup> often benefiting from cross-border access to tailored data-enhanced analytics and insights.<sup>16</sup> Cross-border data commitments can promote economic growth and job creation among IPEF economies.

**Data Transfers & Manufacturing:** Cross-border data transfers are especially beneficial to manufacturing industries, which depend on access to international supply chains, and which increasingly integrate Internet-of-Things (**IoT**) technologies on the shop floor and across assembly lines. It has been estimated that 75% of the value of data transfers accrues to manufacturing and other industries.<sup>17</sup> Conversely, data restrictions are harmful in this area. For example, a 2021 GSMA study conducted in three developing regions (in South America, South-East Asia and Africa) indicates that data localisation measures on IoT applications and machine-to-machine (**M2M**) data processing could result in: (a) loss of 59-68% of their productivity and revenue gains; (b) investment losses ranging from \$4-5 billion; and (c) job losses ranging from 182,000-372,000 jobs.<sup>18</sup> Cross-border data commitments can promote manufacturing across the IPEF region.

**Data Transfers & Services:** As services are increasingly enabled by digital means, cross-border data transfers have increased in importance. A 2020 World Economic Forum study found that,

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<sup>13</sup> Global Data Alliance, *Cross-Border Data Transfers - Facts and Figures* (2020), at: <https://globaldataalliance.org/wp-content/uploads/2021/07/gdafactsandfigures.pdf>

<sup>14</sup> World Bank, *World Development Report* (2020), at: <https://www.worldbank.org/en/publication/wdr2020>. Conversely, the World Bank also found that, "restrictions on data flows have large negative consequences on the productivity of local companies using digital technologies..."

<sup>15</sup> Data localisation mandates and unnecessary data transfer restrictions hurt local innovation because a country that limits cross-border data transfers limits its own industries' access to technologies and data sources that are critical to growth and innovation, business operations, and the transfer of technology. These include: (a) growth-enhancing software solutions; (b) scientific, research, and other publications; and (c) manufacturing data, blueprints, and other operational information. Faced with higher software costs and an unpredictable environment for R&D investments, local industries face challenges keeping technological pace with foreign competitors — threatening both domestic and export market sales. Furthermore, as data restrictions place an undue burden on industries operating in countries imposing them, they also undermine those countries' attractiveness as a destination for investment and R&D.

<sup>16</sup> Local enterprises face competitive harm if they are deprived of the insights that come from consolidating local data sets within larger regional or global data sets for purposes of data analysis. See generally, BSA, *Understanding Artificial Intelligence* (2017), at: [https://www.bsa.org/sites/default/files/2019-03/BSA\\_2017UnderstandingAI.pdf](https://www.bsa.org/sites/default/files/2019-03/BSA_2017UnderstandingAI.pdf); BSA, *What's the Big Deal with Data* (2017), at: <https://data.bsa.org/>; BSA, *Artificial Intelligence in Every Sector* (2019), at: [https://www.bsa.org/sites/default/files/2019-03/BSA\\_2018\\_AI\\_Examples.pdf](https://www.bsa.org/sites/default/files/2019-03/BSA_2018_AI_Examples.pdf).

<sup>17</sup> See Global Data Alliance, *The Cross-Border Movement of Data: Creating Jobs and Trust Across Borders in Every Sector* (2020), at <https://www.globaldataalliance.org/downloads/GDAeverysector.pdf>; See Global Data Alliance, *Jobs in All Sectors Depend Upon Data Flows* (2020), at <https://www.globaldataalliance.org/downloads/infographicgda.pdf>; Global Data Alliance, *Cross-Border Data Transfers Facts and Figures* (2020), at <https://www.globaldataalliance.org/downloads/gdafactsandfigures.pdf>

<sup>18</sup> GSMA, *Cross-border Data Flows – The Impact of Localisation on IOT* (2021).

“approximately half of cross-border [services] trade is enabled by digital connectivity[, which] ... has allowed developing countries and micro, small and medium-sized enterprises (MSMEs) to export through greater visibility, easier market access and less costly distribution. ... Developing countries ... accounted for 29.7% of services exports in 2019.”<sup>19</sup> Cross-border data commitments can help support the growth of services across the region.

**Data Transfers & Trade Facilitation:** Cross-border technology access and data transfers also [reduce supply chain-related transaction costs](#).<sup>20</sup> One recent study estimates that digital tools helped MSMEs across Asia reduce export costs by 82% and transaction times by 29%.<sup>21</sup> Likewise, the Asia Development Bank Institute estimates that electronic commerce platforms, which operate on the basis of cross-border data transfers, have helped some local firms reduce the cost of distance in trade by 60%.<sup>22</sup> Cross-border data commitments in IPEF can help promote these efficiencies.

**Data Transfers & Sustainable Agriculture:** Cross-border access to green technologies, satellite-based data, and other information helps small-scale agricultural producers improve crop yields; mitigate crop risks (including losses from pests, disease, and weather-related events); reduce arbitrage by middlemen (up to 70 percent of smallholder production value is captured by intermediaries); and promote sustainability (agriculture accounts for 70 percent of water use, while one third of global food production is either lost or wasted).<sup>23</sup> Cross-border data commitments can help promote uptake of sustainable agricultural practices and technologies across the region.

**Data Transfers & Sustainable Economic Development:** Analyses by development banks consistently show that cross-border access to technology and data transfers promote sustainable economic growth. For example, there remain over 2.5 billion unbanked people worldwide, many living in remote locations lacking physical banking infrastructure.<sup>24</sup> The US Agency for International Development (USAID) estimates that, by enabling digital financial services that leverage cross-border data, the GDP of emerging economies could increase by more than \$3.5 trillion, or 6 percent, by 2025.<sup>25</sup>

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<sup>19</sup> World Economic Forum, [Paths Towards Free and Trusted Data Flows](#) (2020). Conversely, the World Bank 2021 *World Development Report* has noted that measures that “restrict cross-border data flows ... [may] materially affect a country’s competitive edge in the burgeoning trade of data-enabled services.” World Bank, *World Development Report – Data For Better Lives* (2021), at: <https://openknowledge.worldbank.org/bitstream/handle/10986/35218/9781464816000.pdf>

<sup>20</sup> Global Data Alliance, *Cross-Border Data Transfers and Supply Chain Management* (2021), at <https://globaldataalliance.org/downloads/03182021gdaprimersupplychain.pdf>

<sup>21</sup> Micro-Revolution: The New Stakeholders of Trade in APAC, Alphabet, 2019.

<sup>22</sup> Asia Development Bank Institute, *The Development Dimension of E-Commerce in Asia: Opportunities and Challenges* (2016), at: <https://www.adb.org/sites/default/files/publication/185050/adb-pb2016-2.pdf>

<sup>23</sup> See e.g., Global Data Alliance, *Access to Global Markets, Innovation, Finance, Food, and Healthcare* (2021); Every Sector Is a Software Sector: Agriculture, [https://software.org/wp-content/uploads/Every\\_Sector\\_Software\\_Agriculture.pdf](https://software.org/wp-content/uploads/Every_Sector_Software_Agriculture.pdf); World Bank, *Agriculture and Food* (2020), <https://www.worldbank.org/en/topic/agriculture/overview>; IDB Climate Smart Agriculture, *Thematic Paper: Climate-Smart Agriculture* (Revised Version), p. 5, <http://www.iadb.org/document.cfm?id=EZSHARE-1914875107-52>. The IDB explains the underlying challenge that cross-border access to technologies and export markets can help ameliorate: “Smallholders typically capture a low share of the final value of its products and encounter non-transparent commercialization markets and difficulties in buying inputs and selling their products at fair prices. On top of that, small farm holders typically face limited access to export to new markets and unfavourable prices in international trade, and they are particularly vulnerable to volatility in commodity prices.”

<sup>24</sup> USAID, US Global Development Lab website, available at: <https://www.usaid.gov/digital-development/digital-finance>

<sup>25</sup> See US Agency for International Development, *Digital Strategy 2020-2024* (2020), at: [https://www.usaid.gov/sites/default/files/documents/15396/USAID\\_Digital\\_Strategy.pdf](https://www.usaid.gov/sites/default/files/documents/15396/USAID_Digital_Strategy.pdf); see also See Global Data Alliance, *Access to Global Markets, Innovation, Finance, Food, and Healthcare* (2021). Technologies that leverage data transfers help

Unfortunately, some Indo-Pacific economies are erecting costly data transfer restrictions vis-à-vis one another.<sup>26</sup> As UNCTAD has explained, such “digital fragmentation”:

reduces market opportunities for domestic MSMEs to reach worldwide markets, [and] ... reduces opportunities for digital innovation, including various missed opportunities for inclusive development that can be facilitated by engaging in data-sharing through strong international cooperation. ... [M]ost small, developing economies will lose opportunities for raising their digital competitiveness.<sup>27</sup>

Economic development depends upon cross-border access to knowledge, digital tools, and commercial opportunities. Cross-border data commitments in IPEF can help promote such access.

**Data Transfers & Privacy:** Some argue that data localisation requirements and cross-border data restrictions are necessary for privacy reasons – i.e., to ensure that companies process and use data consistent with a country’s data protection laws. This argument is incorrect. Cross-border restrictions are not necessary to protect privacy and can undermine data security. In lieu of such restrictive policies, countries with robust data protection frameworks often adhere to the accountability principle and interoperable legal frameworks that protect data consistent with national standards, even as the data is transferred across borders. Organizations that transfer data globally typically adopt a set of best practices and internal controls to ensure that the data is protected even when transferred outside of the country. To that end, organizations often rely on various approved data transfer mechanisms, as discussed above.<sup>28</sup>

**Data Transfers & Cybersecurity:** Some argue that cross-border data restrictions are necessary to ensure cybersecurity. However, *how* data is protected is more important to security than *where* it is stored, and transfer restrictions often result in *weaker*, not *stronger*, cybersecurity. Cross-border data transfers help improve cybersecurity because these transfers allow for cybersecurity tools to monitor traffic patterns, identify anomalies, and divert potential threats in ways that depend on global access to real-time data. Stronger cybersecurity is enabled by cross-border data analytics an assertive cyber-defense posture coordinated across IT networks and national boundaries.<sup>29</sup> When governments

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increase access – particularly as 95% of the world’s population is already covered by mobile broadband networks and as new low-earth orbit satellite technologies bring connectivity to previously unserved communities. See e.g., Ericsson, *Ericsson Mobility Report* (November 2019), at: <https://www.ericsson.com/en/mobility-report/reports/november-2019>; Global Data Alliance, *Cross-Border Data Transfers & Telecommunication Network Technologies* (2021), at: <https://globaldataalliance.org/wp-content/uploads/2021/10/10042021cbdttelecom.pdf>

<sup>26</sup> See e.g., USTR, *2021 National Trade Estimate Report on Foreign Trade Barriers* (March 2021), at: <https://ustr.gov/sites/default/files/files/reports/2021/2021NTE.pdf>

<sup>27</sup> UNCTAD, *Digital Economy Report* (2021), at: [https://unctad.org/system/files/official-document/der2021\\_en.pdf](https://unctad.org/system/files/official-document/der2021_en.pdf)

<sup>28</sup> For additional information, see <https://www.globaldataalliance.org/downloads/02112020GDACrossborderdata.pdf>

<sup>29</sup> See generally, BSA, *Moving to the Cloud – A Primer on Cloud Computing* (2018), at [https://www.bsa.org/files/reports/2018BSA\\_MovingtotheCloud.pdf](https://www.bsa.org/files/reports/2018BSA_MovingtotheCloud.pdf). Cloud services delivered across-borders provide security advantages over alternative IT delivery approaches (on-premises or local cloud services):

- Physical Security: Certified personnel can carefully monitor servers 24/7 to prevent physical breaches and can apply consistent protocols over a small number of locations.
- Data Security: CSPs can ensure data integrity through use of state-of-the-art encryption protocols for data at-rest and in-transit. CSPs can establish redundant backups of data in geographically dispersed data centers, mitigating risk of loss in the event of power outages or natural or manmade disasters.
- Advanced Threat Detection: CSPs leverage state-of-the-art enhanced security intelligence They use regular penetration testing to simulate real-world attacks and evaluate security protocols against emerging threats.
- Automated Patch Deployment: Automated and centralized patch deployment and real time updates to network security protocols work to protect systems from newly identified vulnerabilities.



mandate localisation or restrict the ability to transfer and analyze data in real-time, they create unintended vulnerabilities.

**Data Transfers & Regulatory Compliance:** Some claim that cross-border data restrictions ensure government access to data for regulatory or investigatory purposes. The location of the data, however, is not the determining factor. On the contrary, “data localisation requirements can increase ... operational risks, hinder risk management and compliance, and inhibit financial regulatory and supervisory access to information.” Accordingly, regulatory authorities in many countries actually encourage the responsible transfer of data across borders. Likewise, data transfers are critical to other public policy priorities, including anti-money laundering; anti-corruption; and other legal compliance objectives.<sup>30</sup>

**Data Transfers & Fraud Prevention:** Prohibitions on cross-border data transfers in respect of financial data can have significant negative impacts on the effectiveness of fraud prevention and mitigation tools. Effective fraud mitigation as provided by banks, card networks and other players in the financial services sector demands sophisticated monitoring and rapid detection at the time of transaction to interpret and weigh the risk of fraud of each payment transaction as weighed by the facts of that payment transaction as against norms for all payment transactions and that account. Fraud detection models are typically built on global transaction data or transaction data collected from multiple countries since fraud patterns are not limited by national boundaries. Fraud trends which appear in one region or country may apply in others as cardholders travel to different countries, cardholders transact online with merchants in different countries, and the perpetrators of fraud do not respect any national boundary lines. Thus, to build effective fraud models and to gain the necessary insights into fraudulent activity in order to help prevent them, these models must be built off of global or multi-country data sets, based both on the location of the merchant and the location of the cardholder.

**Data Transfers & Innovation:** Some claim that cross-border data restrictions promote innovation. On the contrary, [data localisation mandates and data transfer restrictions undermine beneficial innovation processes](#) — from accessing global scientific and technical research databases, to engaging in cross-border research and development (R&D), to securing intellectual property rights for new inventions, and regulatory product approvals for new products and services.<sup>31</sup>

**Data Transfers & Healthcare:** Healthcare R&D, the submission of health-technology-assessment and regulatory filings, and the provision of services in the life-science industries are increasingly cross-border endeavors which rely on the responsible and secure flow of large volumes of data. These transfers can support the adoption of data analytics and machine-learning technologies, and processing of data from multi-country clinical studies and other research activities. Supporting cross-border data transfers, in a way that is compatible with the best practices in ensuring patient and customer privacy, is essential for the innovation of healthcare products and services, collaboration across multiple public and private research organizations, and the early detection of regional or global

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- Incident Management and Response: CSPs maintain global teams of incident response professionals to respond and mitigate the effects of attacks and malicious activity.
  - Certification: CSPs are typically certified to international security standards and go through regular audits to maintain their certifications.

<sup>30</sup> See e.g., United States-Singapore Joint Statement on Financial Services Data Connectivity, at: <https://www.mas.gov.sg/news/media-releases/2020/united-states-singapore-joint-statement-on-financial-services-data-connectivity>

<sup>31</sup> See Global Data Alliance, *Cross-Border Data Transfers and Innovation* (2021), at <https://globaldataalliance.org/downloads/04012021cbdtinnovation.pdf>

health risks. Restricting such data transfers will undermine the ability to identify new treatments and improve healthcare delivery, to the ultimate detriment of patients in those countries that restrict transfers.<sup>32</sup>

**Data Transfers & Tech Policies:** From artificial intelligence to 5G to the cloud, government tech policies can help coordinate public-private dialogue, support investment, and maximize the benefits of technologies across the economy. Cross-border data restrictions often undermine these policies. For example, the benefits of a “cloud first” policy are most likely to arise in a cross-border context that allows for elastic and scalable delivery of computing resources, rapid load balancing, and ready access to best-in-class technology from all over the world. Using data localisation mandates and transfer restrictions to ban cross-border access to cloud computing infrastructure and technology would deprive local enterprises (including MSMEs) and users of:

- Cross-border access to IT resources hosted abroad;
- Cross-border collaboration and communication with foreign business partners;
- Foreign transactions and business opportunities; and
- Improved resiliency resulting from data storage across multiple geographical locations

**Data Transfers & COVID-19 Recovery:** As governments seek to limit the spread of COVID-19, cross-border access to technology and data transfers have become essential for countries seeking to sustain jobs, health, and education. This is particularly true for the [remote work](#), [remote health](#), [supply chain management](#), and [innovation](#)-related technologies that depend on cross-border access to cloud computing resources.

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<sup>32</sup> Global Data Alliance, *GDA Website – Healthcare* (2022), <https://globaldataalliance.org/sectors/healthcare/>; Global Data Alliance, *GDA Website – Biopharmaceutical R&D* (2022), <https://globaldataalliance.org/sectors/biopharmaceutical-rd/>