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#### Data Transfers Across Industrial and Business Sectors

Submitted by: Global Data Alliance



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## **GLOBAL DATA ALLIANCE**

DATA TRANSFERS ACROSS INDUSTRIAL AND BUSINESS SECTORS

## **ABOUT DATA & DATA TRANSFERS**

## What is a Data Transfer?

- "Cross-border data transfers" refer to the movement or transfer of information across IT networks.
- Companies of all sizes rely on data transfers.
- This includes companies with int'l customers or operations.
  - Any communication to a person / device across a border
  - Financial transactions
  - R&D collaboration
  - M2M and IOT transactions



Source: OECD





Energy

## **DATA TRANSFERS IN DIFFERENT SECTORS (1)**

#### Data Transfers are Critical to:

- Each economy's connectivity and its access to the global marketplace and supply chains;
- The ability of companies of all sizes to use new technologies, including the industrial cloud computing and data analytics, to create jobs, boost productivity, and reach new markets; and
- The workforce's ability to remain productive through teleworking, virtual collaboration and online training, as well as remotely delivered healthcare and other services

The protection of privacy, security, and regulatory compliance.

- In finance, the ability to transfer and analyze data in real-time across borders is critical to efforts to combat financial fraud, money laundering, or other illicit financial transactions.
- In cybersecurity, global access to real-time data are necessary to monitor traffic patterns, identify anomalies, and divert of potential threats.
- In IP and other criminal enforcement, data transfers are critical to developing insights on sources, distribution hubs and networks, and end-user markets, implicated in the distribution of dangerous or adulterated counterfeit products, commercial scale piracy, and other illicit activities.

## **DATA TRANSFERS IN DIFFERENT SECTORS (2)**

#### Data Transfers are Critical to:

- **Research and development (R&D)**, which depends upon access to globally sourced research data from laboratories across the world, as well as collaboration, joint research, and the exchange of ideas and knowledge among teams of inventors, designers, authors, and other creators and innovators across borders.
- Artificial intelligence-based innovation, which depends upon analysis of data sets consolidated across borders to identify insights and patterns that can aid R&D teams in the development of novel solutions to scientific and technical challenges.
- Safety testing and licensing approvals for new aircraft, vehicles, medical devices, machine tools, and robotics, etc.
- **Precision farming techniques** that use cloud-based analytics to help producers to maximize crop yields, while improving insights into weather, soil, and other relevant environmental conditions. These technologies can also help mitigate environmental impacts by minimizing water, fertilizer and pesticide use, and by reducing the carbon footprint of agricultural activities.
- Cross-border access to **climate data and green technologies**, especially via environmental data analytics and Al-driven energy solutions, can help reduce carbon footprints in energy generation, distribution, and consumption.
- **Supply chain logistics**, in which cross-border data helps optimize sourcing, freight scheduling, and inventory management; promotes the fight against counterfeiting; increases efficiency and resilience; reduces costs; and minimizes disruption

#### **DATA TRANSFERS – FACTS & FIGURES**



www.globaldataalliance.org/downloads/gdafactsandfigures.pdf

#### **DATA TRANSFERS ACROSS REGIONS**



Cisco, Annual Internet Report 2018–2023 (2020), https://www.cisco.com/c/en/us/solutions/collateral/executive-perspectives/annualinternet-report/white-paper-c11-741490.pdf.

#### DATA TRANSFERS AT EVERY STAGE OF THE BUSINESS VALUE CHAIN



www.globaldataalliance.org/downloads/infographicgda.pdf

### **DATA TRANSFERS & MANUFACTURING**

Manufacturers rely on data transfers to stay competitive in an era of cloud-enabled digital transformation.

The top technologies helping manufacturers meet their goals include:



## **DATA TRANSFERS & AUTOMOTIVE SECTOR**

#### • Global automotive engineering. Data transfers are essential to:

- Industrial lifecycle management and virtualized engineering (e.g., digital twins) in global design.
- The ability of engineering teams to collaborate across borders at every stage of the product development cycle.

#### Cross-border industrial cloud. Data transfers improve:

- End-to-end visibility across a supply chain comprising thousands of global facilities delivering millions of parts on a daily basis.
- Smart factories also rely on Internet of Things (IoT) sensors and robots to improve control over the manufacturing process from data centers across the world.

# • Cross-border enhanced safety and maintenance. Data transfers can facilitate:

- Remote, digitally-enabled predictive maintenance, with 200+ million vehicles having Over-the-Air (OTA)
  update capability.
- Allows manufacturers to seamlessly address energy efficiency, safety, or other performance issues via satellite- and cloud-enabled software updates.
- Cross-border automotive connectivity. Data transfers and AV's / connected vehicles
  - Connected vehicles generate some 30 terabytes of data each day / Highly automated vehicles 10 times that.
  - Sensors throughout the vehicle allow for on-the-road monitoring and predictive maintenance via cloudenabled analysis of traffic and weather conditions, anonymized performance information from sensors, etc.

### **BROAD RECOGNITION ACROSS INDUSTRY SECTORS**

#### **Multi-Industry Statement for WTO JSI**

- Urges WTO negotiators to
  - Prohibit unnecessary or discriminatory data localization mandates and data transfer restrictions
  - Support interoperability and transparency among legal frameworks
  - Apply rules across all economic sectors
  - Adopt frameworks to protect personal information



January 26, 2021

"To enhance certainty and economic opportunity, any agreement should discipline unnecessary or discriminatory data localization mandates and data transfer restrictions. Any agreement should also be guided by principles of transparency and interoperability among legal frameworks; should apply across all economic sectors; and should require all economies to adopt or maintain legal frameworks to protect personal information."



# **GLOBAL DATA ALLIANCE** TRUST ACROSS BORDERS

Please direct any questions to gdainfo@bsa.org