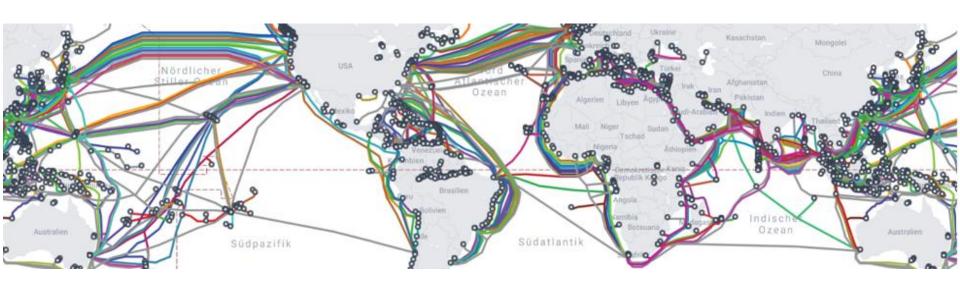




Providing Al-Ready Data at Scale How to Overcome Data Scarcity

Kurt Kammerer, kurt@datavaccinator.com



DataVaccinator



DataVaccinator (DV) powers Data Ecosystems. By "vaccinating data against abuse", DV software and solutions protect sensitive data, enable secure collaboration and ensure Data Sovereignty in AI environments. DV products rely on its unique technologies (60 patents).

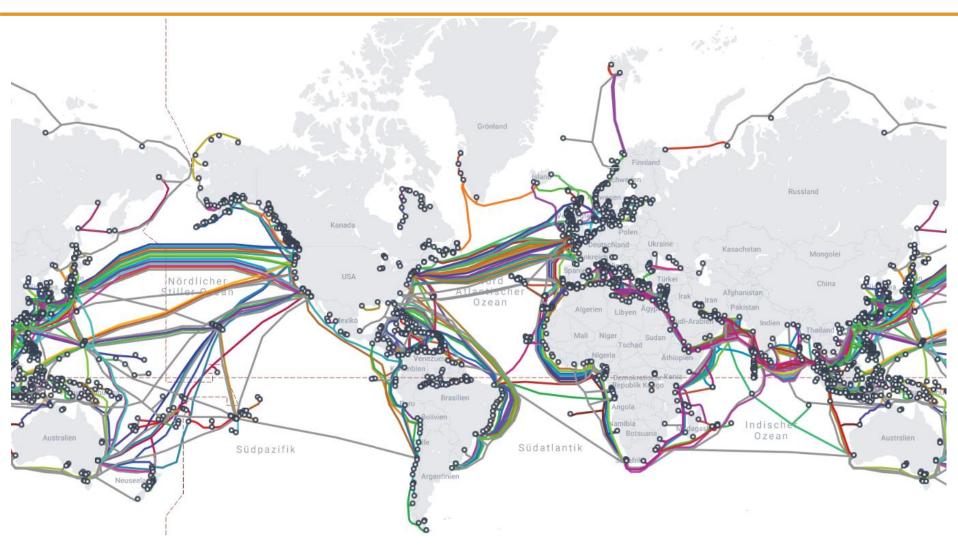
As partner in major initiatives, DV provides guidance on cyber security, governance, compliance, setup and operation of AI-ready data networks.

Background and Expertise:

- Deep Technical Know-how in secure Collaboration and Ecosystems
- Intellectual Property Rights (IPR): Assessment and Management
- Data Ecosystems: Healthcare in EU/MENA, Secure Supply Chains (WEF),
 Belt&Road (Asia), Logistics (Air, Sea, Road), Cyber Security (ASEAN)
- Belfer Security Center (Harvard, JFK), WEF Security Group

Global Connectivity is a Given





Source: https://www.submarinecablemap.com/ 07 Nov 2025

Connectivity – Indispensable for Society



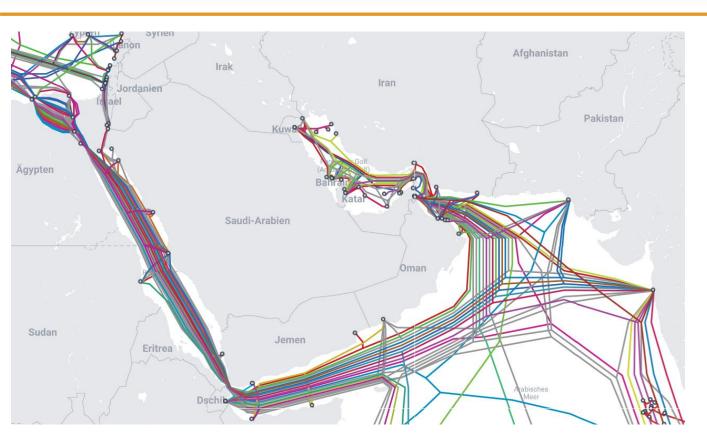


High bandwidth and low latency for user-friendly data-rich applications

Source: https://www.submarinecablemap.com/ 07 Nov 2025

Multi-Redundancy nearly Everywhere





Multi-Redundancy Strategies ensure high bandwidth connectivity globally.

Global seacable infrastructure was owned by consortia and is now owned (or least controlled) by the Hyperscalers.



https://carriercommunity.com/cc-events/ccl-2025-summit-muscat/290/venue

Al's Hunger for Data and Feeding its insatiable LLM Animals





Figure: https://www.linkedin.com/pulse/ais-hunger-games-lucrative-data-market-exploding-feed-insatiable-9a4ie/

Al's Hungry Brain: A Data-Driven Dilemma





Connectivity is not Al's bottleneck ... but the lack of high volumes of Al-Ready Data!

Why is AI so data-hungry?

- ➤ Training Models: Al models learn from massive datasets. The more data they consume, the more accurate and sophisticated they become.
- ➤ Real-time Processing: Al applications often require real-time processing of large amounts of data, such as in self-driving cars or facial recognition systems.
- ➤ Constant Updates: Al models need to be continuously updated and retrained to keep up with new data and evolving trends.

Figure: https://www.linkedin.com/pulse/ais-hungry-brain-data-driven-dilemma-meghan-mcparland-tgvqe/

The Data Scarcity Challenge





Whereas Hyperscalers have access to large volumes of AI-Ready Data (from Google Search, Instagram to linkedin), most others do not.

Data scarcity—the lack of sufficient, diverse, and well-labeled datasets—is emerging as a critical bottleneck in AI development. While tech giants like Google, OpenAI, and Meta benefit from massive datasets, many organizations and researchers struggle to train robust models. Source: <u>Linkedin</u>, Sibin

Lack of Real-World Data >> Go Synthetic ?!?





SYNTHETIC DATA IN HEALTHCARE

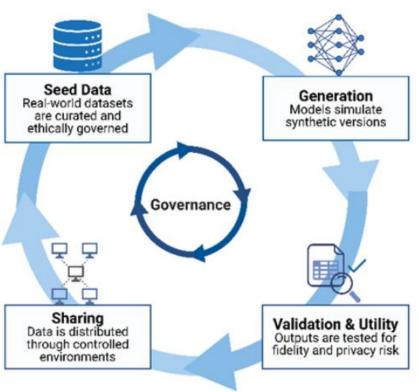


Figure 1. The Synthetic Data Lifecycle: From Ethical Sourcing to Responsible Reuse

Source: Synthetic Data in Healthcare

The Promise of Synthetic Data





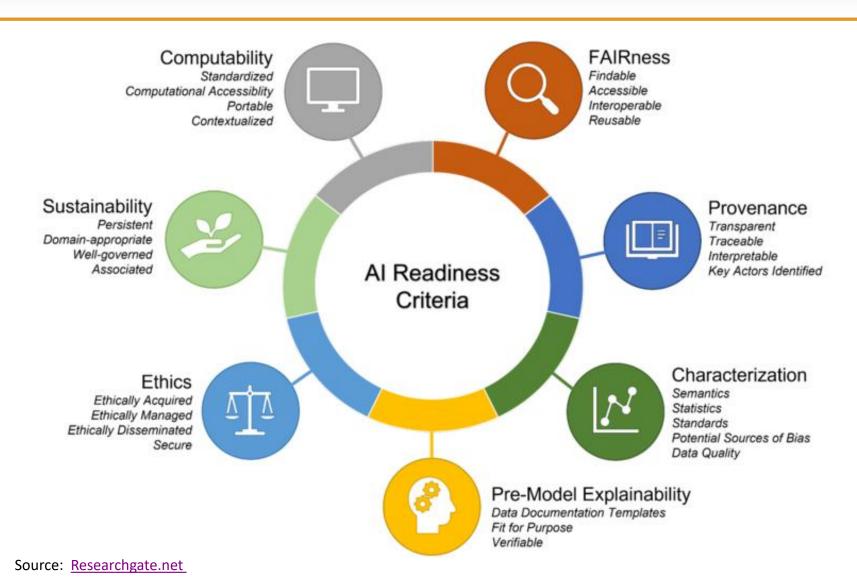
From Gaps to Gains: Using Synthetic Data to Improve Al Fairness

High-performing healthcare AI requires large, diverse and representative datasets, something that real-world clinical data often fails to deliver. SD closes these gaps by augmenting datasets with rare conditions, catering for balanced class distributions and greater demographic variability.

Source: Synthetic Data in Healthcare

How to make Data "Al-Ready"

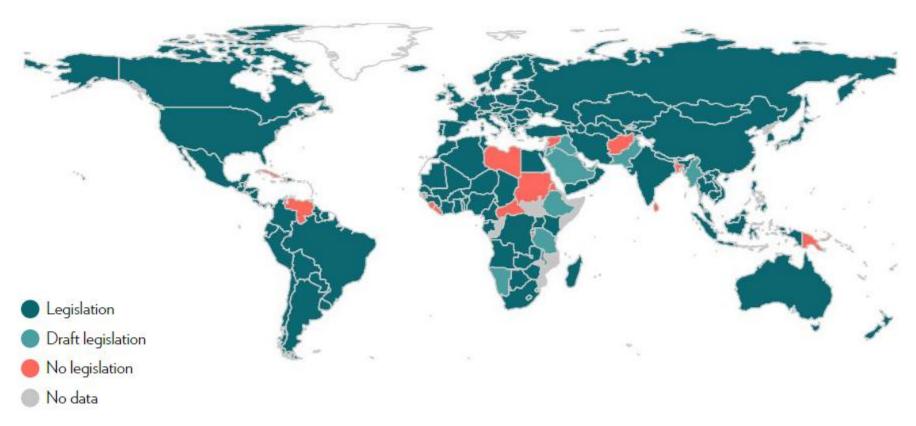




Legislation in Place for Cross-Border Data Exchange



Figure 2. Data protection and privacy legislation worldwide



Source: UNCD, Data Protection and Privacy Legislation Worldwide (2021). https://unctad.org/page/data-protection-and-privacy-legislation-worldwide

MENA Cross-Border Data Exchange >> Al-Ready Data at Scale



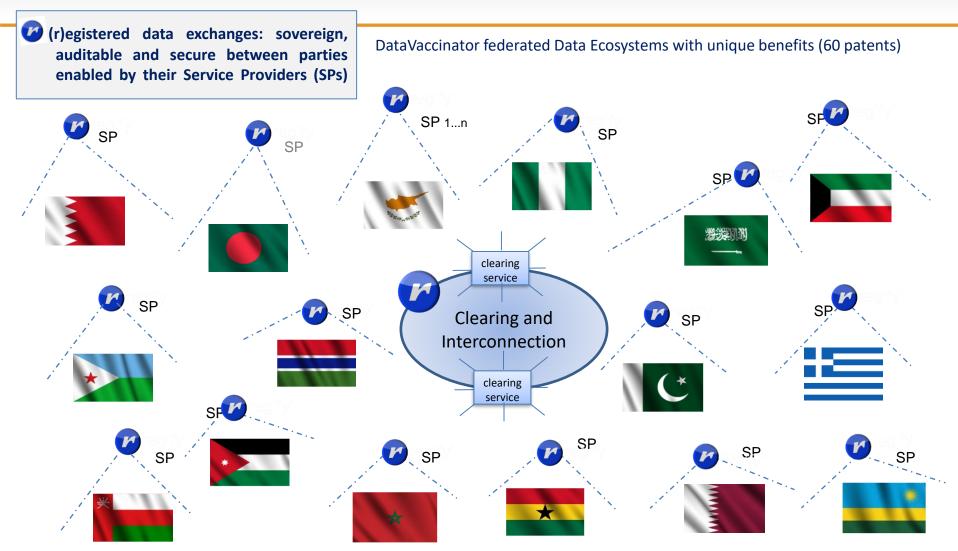
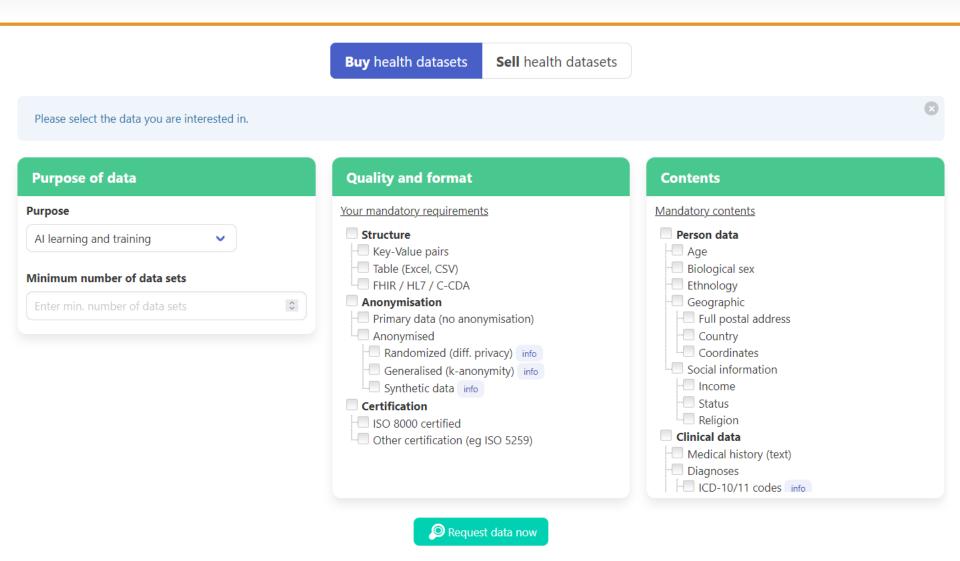


Fig.: DCO.org Sovereign Data Ecosystems with multiple service providers (SP: any data, any DC, any transport channel), connected via Clearing

Emergence of Markets for Al-Ready Data





https://www.datavaccinator.com/poc-marketplace/

Let's stay in touch.



Thank you.

slides at https://datavaccinator.com/news.html

Kurt Kammerer, CEO https://www.linkedin.com/in/kammererkurt/

DataVaccinator SARL 7, route d'Esch

L-1470 Luxembourg

Luxembourg

DataVaccinator Limited

VD, 1st floor Masdar City, Abu Dhabi United Arab Emirates **DataVaccinator LLC**

Riyadh, KSA