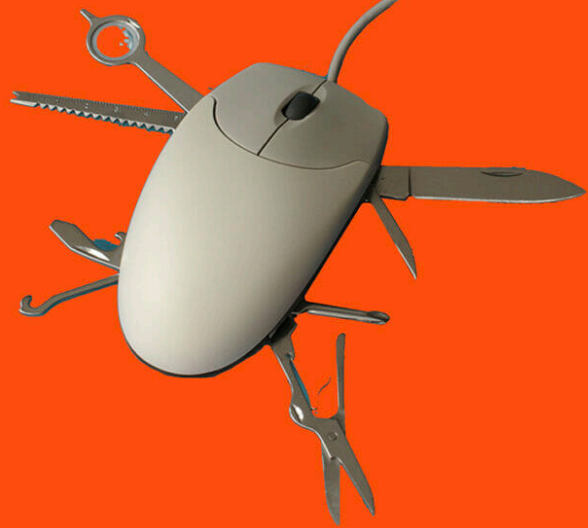


# Building Digitally Accessible Tech Requires Accessible Data

## Improving Digital Accessibility with Data



Today is [Global Accessibility Awareness Day](#) (GAAD), and it's a good time to talk up the need for more accessible tech—and the infrastructure that makes it possible.

Data is supposed to be an enabler: of insights, success, research, you name it. It's also behind improved *digital accessibility*: web-based content, services, and products that are accessible to those with disabilities, whether it's cognitive, visual, hearing, or motor. Emerging technologies are making strides in digital accessibility possible, and the results are pretty exciting.

## How Accessible Data Enables Better Digital Accessibility

GAAD was created to get people talking, thinking, and learning about digital access and inclusion. But there are many ways to think about accessibility—most commonly, as GAAD highlights, the need to adapt technology tools to people with different abilities.

Data processing lends a hand in creating accessible technology. With this AI and natural language processing, we can build systems to convert text to speech and offer faster, more accurate closed

captioning. Computer vision can improve how [images are processed](#) and described, creating more meaningful text descriptions for the visually impaired. Adaptive hardware will allow the motor impaired to use eye movements to navigate on their devices. And the list goes on.

The AI models behind this (and the data they're trained on) will enable these technologies to get smarter over time.

## The Smart Tech-Storage Connection

As with all of these [high-performance computing-based technologies](#), success comes down to data. Building digitally accessible experiences requires accessible data. Slow time to insights means [bottlenecked AI data pipelines](#), which in turn means laggy tech.

These enormous wins require faster, more powerful data storage.

At Pure, we see data insights as an access issue, too. Data storage and analysis was once the province of people and organizations with very deep pockets and very complex technology. But thanks to breakthroughs in data storage and availability, this gap in accessibility across industries and segments of the economy is closing.

The trend is not just about more cost-effective solutions for data storage—it's about features that allow data access and insights to be available beyond a small group of corporate analysts and technology administrators. Health and science research organizations, nonprofits, and NGOs have a critical need for data-crunching to generate healthcare breakthroughs, understand climate change, or address the refugee crisis—to name a few examples.

## When Highly Accessible Insights Lead to Breakthroughs

We see examples every day of the benefits of greater accessibility of data storage and analytics solutions. In genomics research, where researchers will generate up to [40 exabytes of data per year by 2025](#), organizations performing sequencing and analysis need massive data pipelines, as well as data architecture with access for a wide range of applications and use cases.

The [Australian Genome Research Facility](#) (AGRF) provides critical genomics data services to global researchers and clinicians in the biomedical, clinical, agricultural, and environmental fields. As its data needs grew, AGRF's legacy disk-based storage systems couldn't meet client needs for real-time genomics data. The organization replaced its legacy disk storage with Pure Storage® [FlashBlade](#)®, reducing pre-analysis times from 18 hours to just 3 hours, and checksum processes from 10 hours to 23 minutes.

*Read more: [How Data Storage Can Empower STEM Leaders to Dream Big](#)*

## Simplify Access to Data for Every Level of Society

GAAD notes that people with disabilities are among the most underserved by today's digital products. One billion people worldwide have disabilities, and it's up to the developers and technologists behind these products to improve their accessibility. We're making big strides.

A student in a dorm room, a startup focusing on wildlife conservation—whatever the data needs, there's a wide swath of people and organizations that deserve the benefit of easier access to data. As the state of the art of data storage and analysis improves, breakthroughs and insights will proliferate, and we will all benefit.

Pure Storage · The Impact of AI Across Industries

