

# Disrupting the Digital Divide: Technology First Systems Change



*Presented by Kaley Day*  
*WA Bridge Forward Virtual Conference*  
*July 24, 2025*

**KU** CENTER ON  
DISABILITIES



**State of the States**  
In Intellectual and Developmental Disabilities



**Everyone has a  
technology story...**

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# Our Technology Story

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*Carey's day-to-day world may be small, but his imagination and community are big – Technology supports that.*



The ubiquity of technology is changing the world around us and how we must **interact, survive, and thrive** within that world.

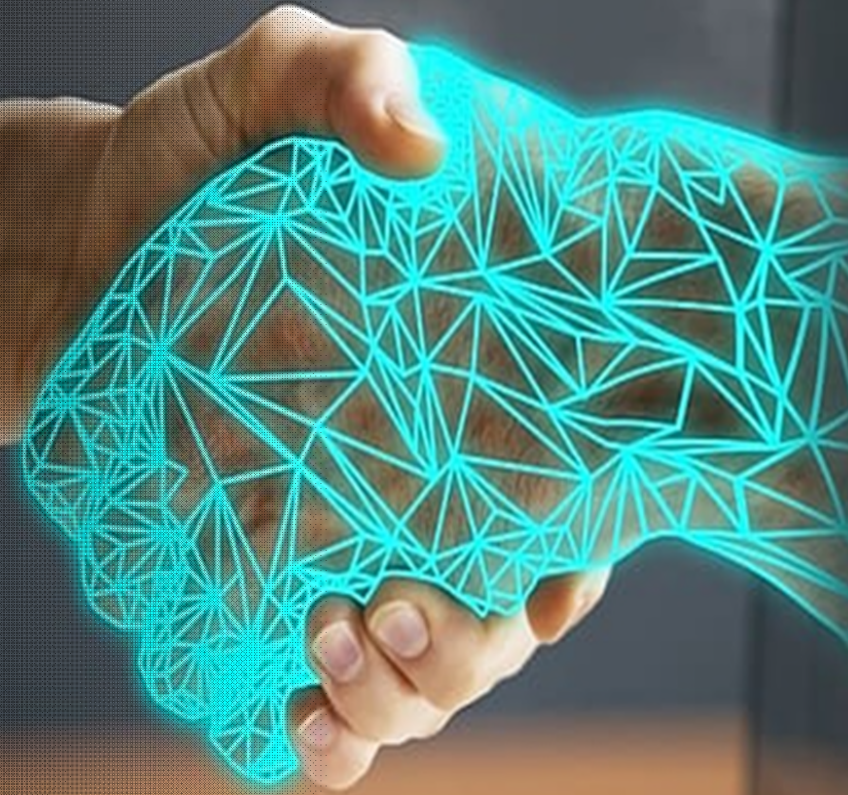
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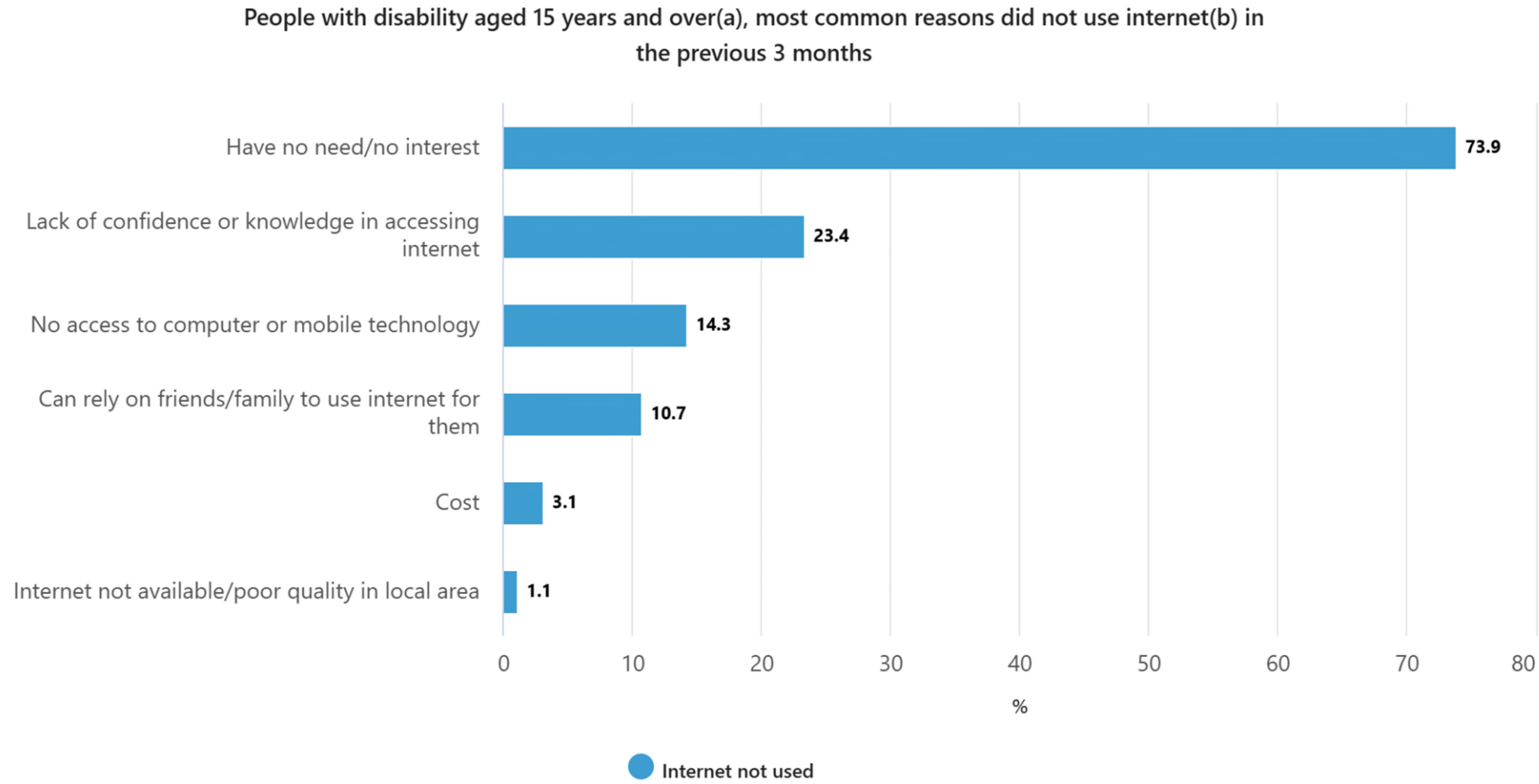
# Technology Divide for People with Disabilities

- Lack of inclusive design of technology
- Failure to address “useworthiness” and desirability alongside usability
- Lack of digital/technology literacy and resilience
- Gatekeepers that limit opportunities
- Lack of adequate supports
- Systemic barriers
- Economic barriers





# *“Why would I?”* – Addressing “Useworthiness”



a. Living in households

b. People could report more than one reason.

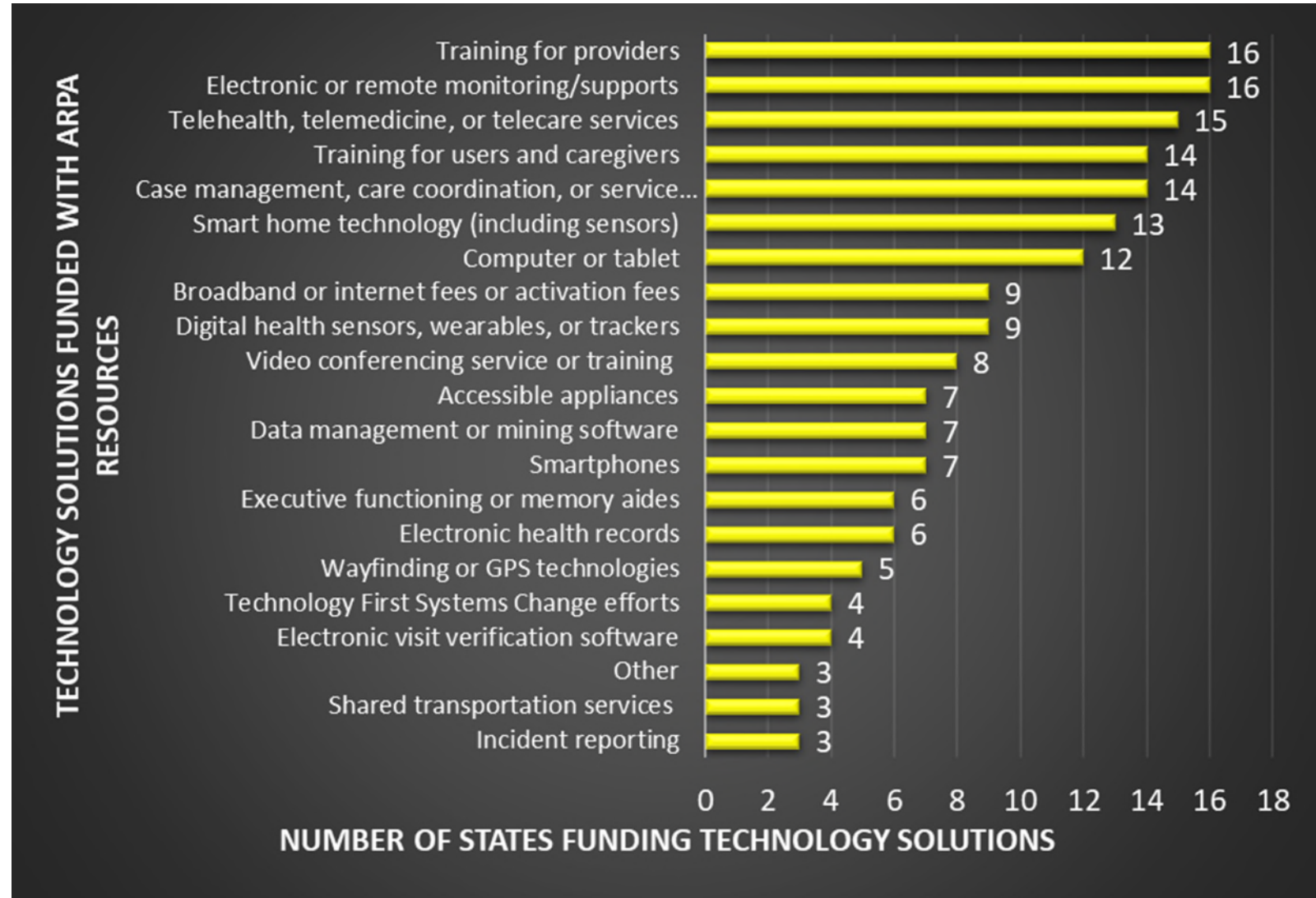
**Lack of access to the digital and technology community prevents access to community living.**



# The Rise and Impact of Telehealth

Studies show the use of telehealth can decrease no-show rates in clinical settings.

Disparities remain, especially for older, non-white, rural, and low-income communities.





A person's hands are shown holding a glowing, textured globe. Overlaid on the globe and the background is a network of glowing orange lines and dots, resembling a digital or neural network. The background is dark with some bokeh light effects.

# Technology First

*Not a singular program or service,  
but a framework for systems change.*

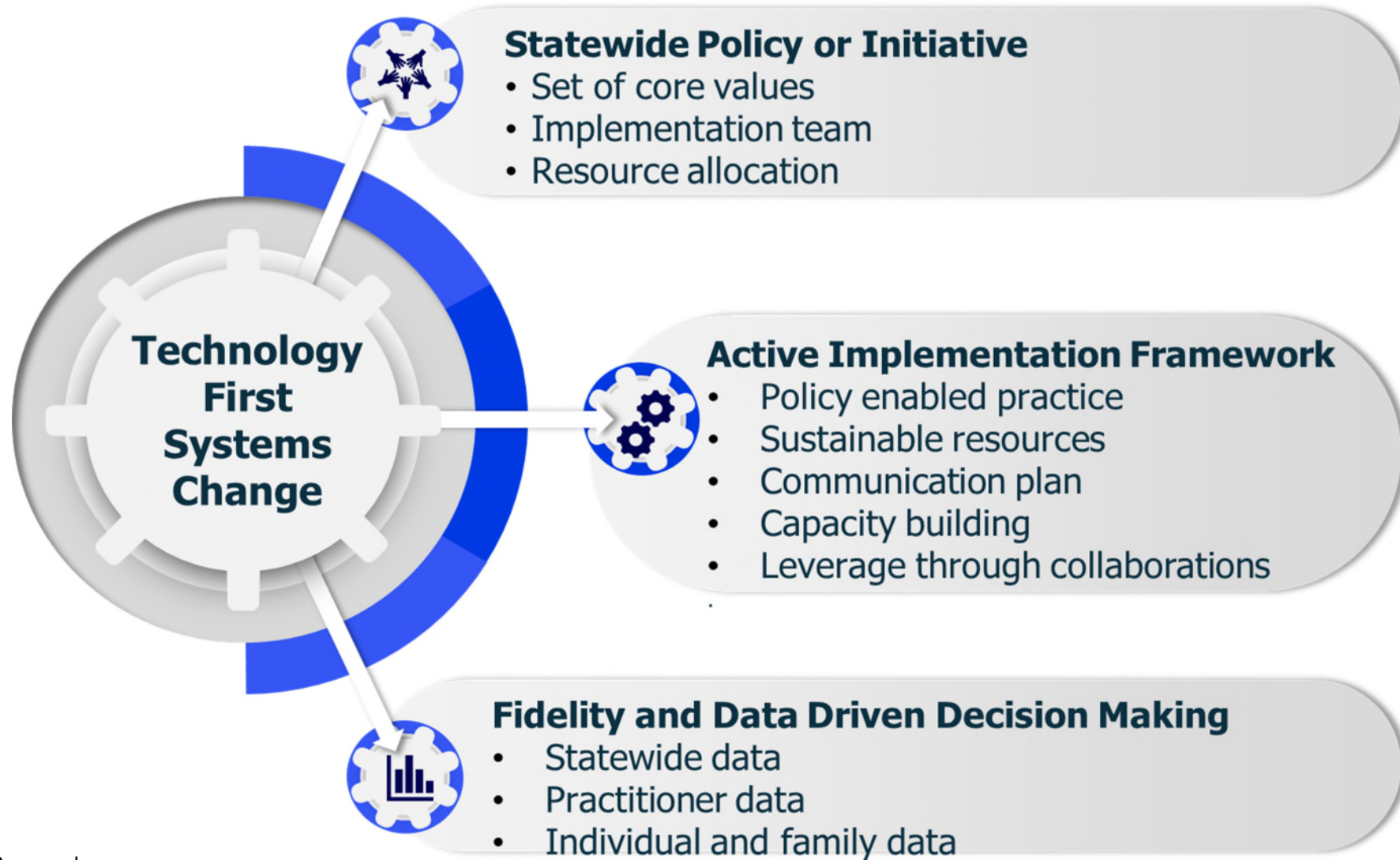
# Technology First Systems Change

“Framework for systems change where technology is considered first in the discussion of support options available to individuals and families through person-centered approaches to promote meaningful participation, social inclusion, self-determination and quality of life” (Tanis, 2019)





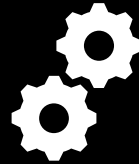
# Technology First Systems Change Model



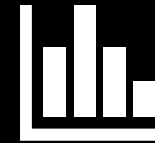
# Some Technology First Systems Change Component Initiatives



- Tech First Systems Change Maturity Model
- State and Federal Policy
- National Committees & Forums
- Tech First Statewide Committees



- Training for Providers and Consumers
- “Technology Solutions Specialist” Program
- Inclusive Design and Cognitive Access
- Accessible Language and Content
- Person-Driven Technology Selection

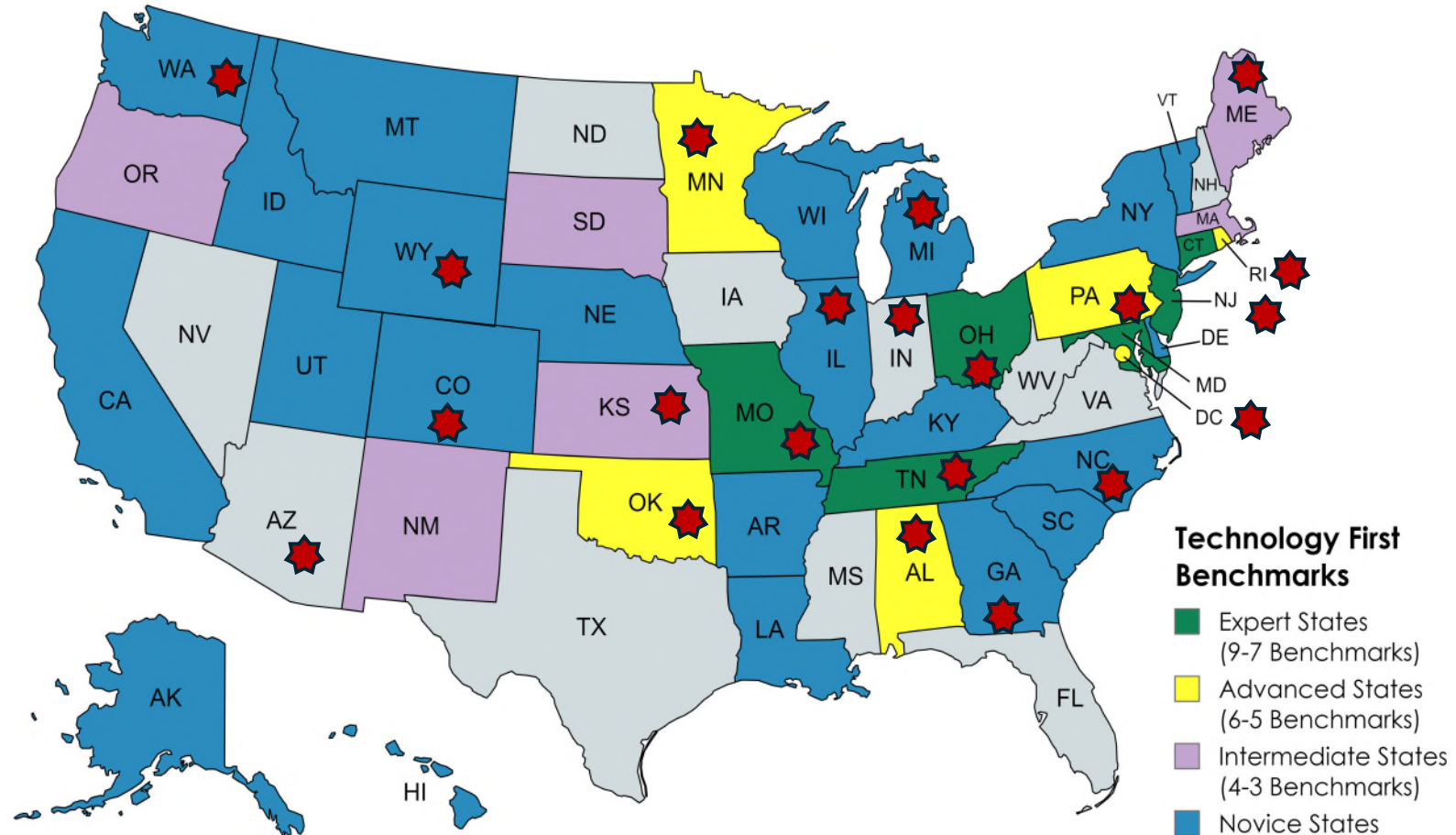


- National and Statewide Surveys
- Technology Needs and Barriers Survey
- Technology Resiliency, Agility, and Literacy Questionnaire (Tech-RAL Q)
- Provider Readiness Evaluation



# Technology First Systems Change Benchmarks

★ KU Partner  
(21 States)



# President's Committee for People with Intellectual Disabilities 2024 Report

- *Advancing Independence and Community Integration for All: Supporting Individuals with ID Through High-Quality Home and Community Based Services*
- “Six principles considered pivotal to strengthening and sustaining the nation’s HCBS infrastructure...  
...States can use the *Technology First* framework, which considers technology first in a discussion of available support options.”
- [Link to the State of the States website](#)





# The 'Firsts' – Integrating Movements

## Technology First

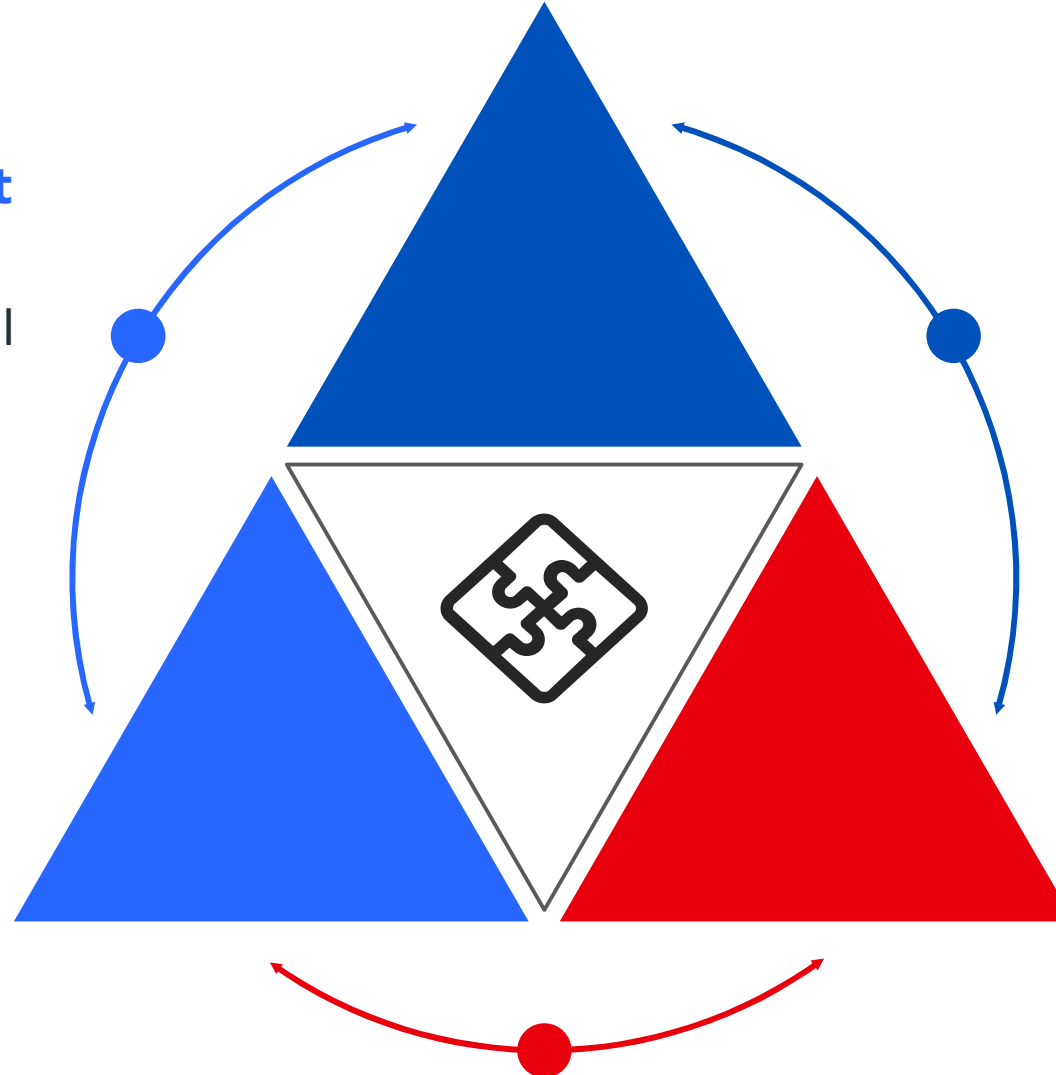
Identifies tools for autonomy and goal attainment

## Person-Centered Practices

The foundation in increasing a person's autonomy through their goals, needs, preferences and values.

## Employment First

Identifies employment as a priority outcome



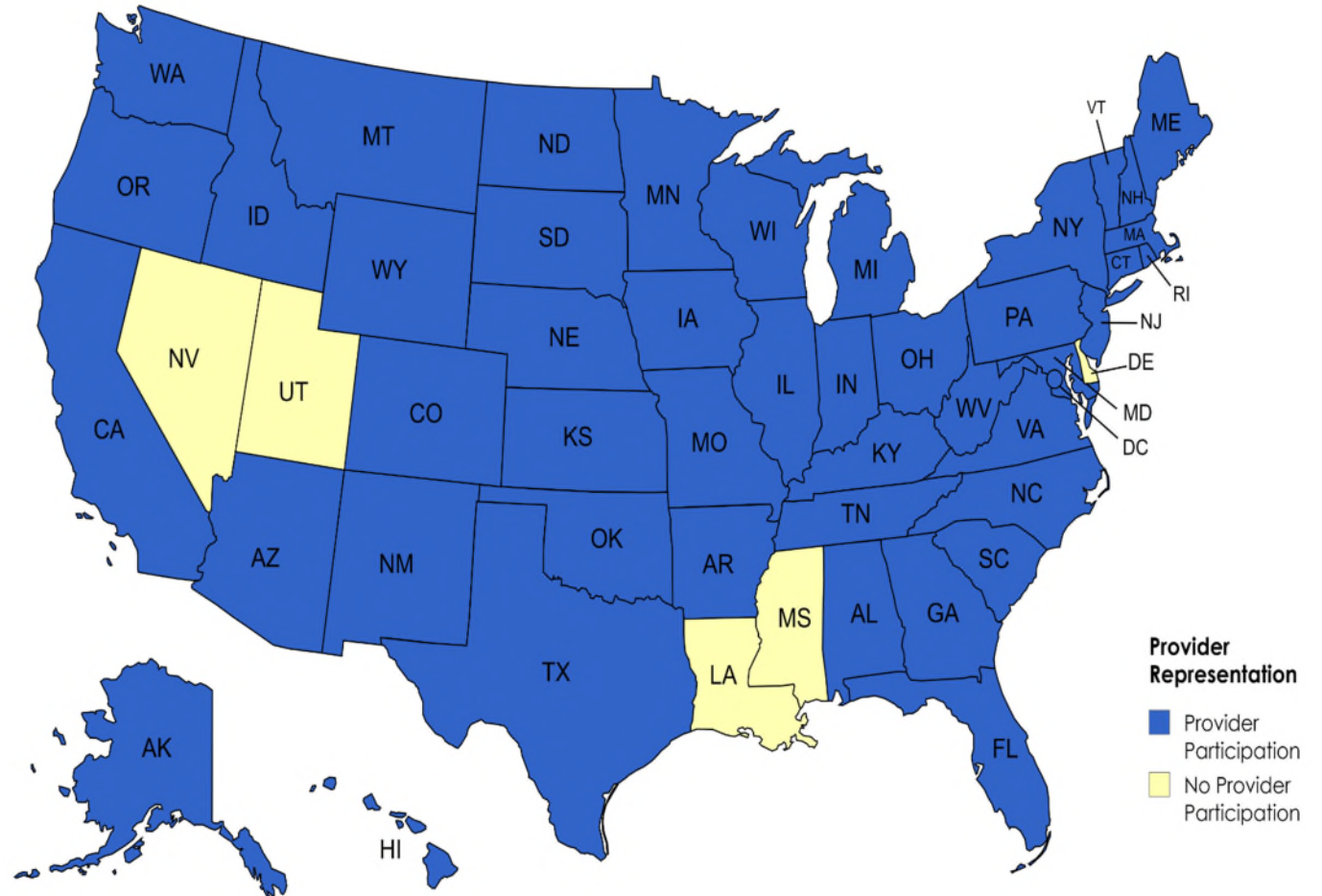
# Technology 2.0 Provider Survey



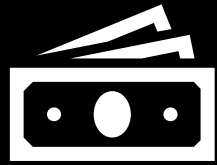


# ANCOR 2.0 Technology Solutions Report (N=283)

1. General organizational information
2. Technology barriers
3. Technology investments
4. Pandemic-related questions
5. Technology First Systems Change



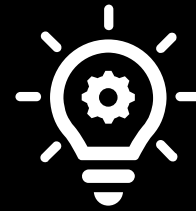
# Barriers That Prevent Advancement to Technology Solutions for Individuals with I/DD



Financial  
resources  
(64% in 2024)



Reimbursement  
of services  
(63% in 2024)



Knowledge of  
available and  
emerging  
technologies  
(57% in 2024)



Training on  
available and  
emerging  
technologies  
(50% in 2024)



A person with a neck brace and arm tattoos is sitting at a desk, using a laptop. The laptop screen shows a video call with another person. The background is a blurred office or home workspace.

# Technologies Provided with Public Dollars

1. Video conferencing (65%)
2. Adaptive aids, or equipment / Environmental accessibility adaptations (EAA) / home modifications (64%)
3. Durable medical equipment (63%)
4. Assistive technology (AT) (53%)
5. Electronic or remote monitoring/supports (41%)





# Technologies Provided With Organizational Funds

1. Computers or tablets (78%)
2. Broadband or internet activation fees (77%)
3. Smartphones (49%)
4. Smart home technology (39%)
5. Accessible appliances (32%)



# Future Technology Investments



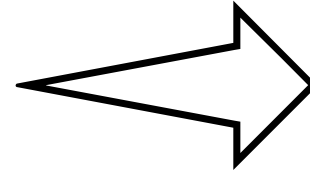
1. Smart home technology (63%)
2. Digital health sensors (53%)
3. Wearable technology (50%)
4. Computers or tablets (45%)
5. Accessible appliances (40%)
6. Executive functioning or memory aids (37%)
7. Smartphones (31%)
8. Wayfinding or GPS technology (30%)
9. Electronic visit verification (26%)
10. Broadband or internet activation fees (24%)



# Cost Savings and Efficiencies



**53%**  
**2020**



**85%**  
**2024**

Providers who indicated they could demonstrate cost savings or greater efficiencies as a result of investing in technology solutions

# Technology First Data Highlights

**38%** of providers do not know if they have a statewide Technology First policy or initiative

**47%** of organizations reported investing in capacity building for case managers, providers, caregivers and consumers to learn, upkeep and update technology solutions

Only **24%** of providers have completed a user technology needs assessment

**36%** of providers require the consideration of technology solutions as part of the person-centered service plan

**84%** of providers agree that greater technology solutions could aid in addressing the direct workforce crisis

**8** distinct funding authorities supported technology training in 2023

Providers are most interested in working to support their state modernize and harmonize policies to support technology access (**58%**)

**85%** of providers are interested in obtaining assistance in conceptualizing, drafting, or advancing technology related training, policies, or initiatives

# State of the States' Technology Initiatives

## Wearables for Wellness

- Health Wearable Accessibility
- Technology Needs and Barriers Survey
- Self-Directed Health Goal Setting
- Tech Skill Development (Tech RAL-Q)
- Guide for Accessible Wearables for Health Professionals



**WEARABLES  
FOR WELLNESS**

Accessibility of Wearables

## PA Tech Accelerator

- Statewide Provider Assessment
- Technology Solution Specialists Training and Development
- MCO Tech Training
- Provider Readiness Assessment
- Technology First Statewide Steering Committee
- State Summits
- Case Manager Training



**PENNSYLVANIA  
TECH ACCELERATOR**

## Accessible Design

- Accessible Icons
- Narrative Visualizations
- National Network of Technology Solution Specialists and Training
- Data Agency



**HELP US  
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FOR YOU**

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Email: [icondesign@accessibilityinsights.org](mailto:icondesign@accessibilityinsights.org)  
Or call 781-954-0436



## AI and Employment

- Ethics of AI
- Building inclusive AI models
- Using AI for career advancement
- Examining AI policies for service definitions



## Technology First for Kansans

- Technology Needs and Barriers Survey HCBS Waiver Recipients
- Targeted Case Manager Technology Training
- Statewide Council
- Technology Solution Specialists
- Statewide Think Tank
- AT Act device deployment
- AT Funding Manual
- AT Fairs



**Technology  
First for  
Kansans**




# Technology Solutions Specialists

Individuals with lived experience trained in:

- Assistive technologies and accessibility features
- State resource navigation
- Storytelling and advocacy
- Plain language and accessible content
- Peer mentorship

## AI

The GOOD and BAD




### What is AI?

- AI stands for artificial intelligence.
- When people talk about AI, they are usually talking about generative AI, like Chat GPT.
- Generative AI takes text, images, and videos from the internet and turns it into new text, images, and videos.
- Technology companies like Google, Adobe, Microsoft, and OpenAI make generative AI.


### How can you use AI?

You can use AI to...


get help writing emails or social media posts




get step-by-step instructions for cooking




make different texts, like articles or laws, easier to read




talk with an AI assistant, like Alexa or Siri




caption meetings and videos with speech recognition



describe places, people, and the world around you through your camera




Josh needs to replace the tire on his bike, but he doesn't know where to start. Josh uses an AI app on his phone to make easy-to-read, step-by-step instructions for replacing his tire.




## AI

The GOOD and BAD




### What are the risks?


AI can give you info that looks true, but is actually misleading or false.




It can be risky to share personal information with AI, like your name or social security number.



AI for hiring and medicine does not have enough data on people with disabilities.




AI images, text, and videos are not always accessible to people with disabilities.




### How to Spot AI Images

1. Look for any writing. Do the words make sense?
2. Look for people's hands. AI can sometimes have trouble making hands and fingers look natural.
3. Look for people's faces. In AI images, faces will sometimes look different than the rest of the picture.

#### REAL



#### AI



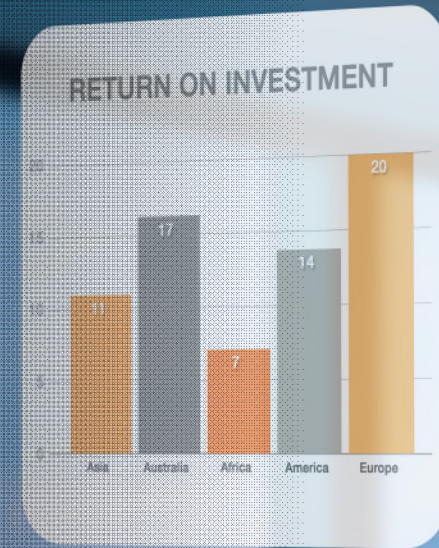
A Pennsylvania Tech Accelerator product made possible by the Pennsylvania Department of Human Services and the American Rescue Plan Act

*The next generation of technology leaders and consultants*



# Disruptive Technologies – Forbes 2025

1. Automated decision-making agents
2. AI governance
3. Multifunctional robots
4. Spatial computing
5. Post-quantum cryptography
6. Neurological Enhancements – healthcare and performance
7. Energy-efficient computing
8. Advanced tech to combat misinformation
9. Hybrid computing to optimize complex data tasks
10. Ambient intelligence to anticipate human need



Investment



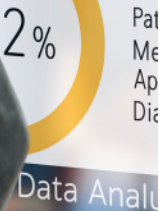
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Data Analy



# Realistic Expectations Driving Action

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People with disabilities should have the opportunities to be Technology Enthusiasts

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People with disabilities deserve to have access to technologies of their choosing across all domains of living

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People with disabilities should be trained to be the next generation of *Technology Solutions Specialists* influencing policies and advocacy

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People with disabilities should be educated in *data agency* to have control of their own digital footprint

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People with disabilities should be co-designers of personalized ecosystems

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Technology should be used to develop environments and products that adapt to people with disabilities – not the other way around



## Matt Smith, Technology Solutions Specialist

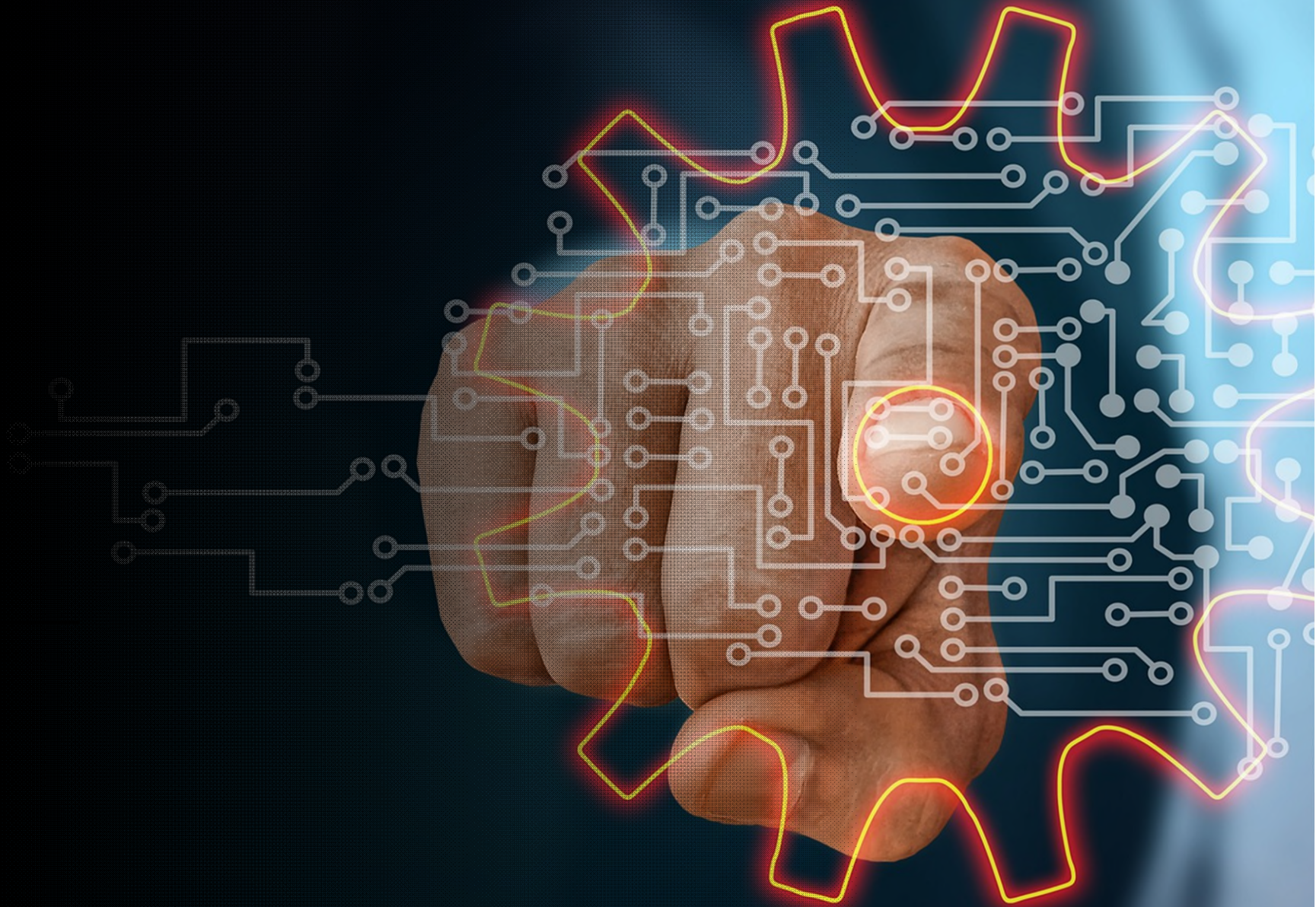
*"Technology has allowed me to be a part of various communities or spaces online that are specific to my interests that I cannot or would not be able to find in person."*

*Chat programs like Messenger, Discord, etc. let me connect with anybody in the world instantly, and this is incredibly important to me because I'm a very social person but have issues with transportation, so actually getting to the people I want to see and the places I want to be is very difficult."*





**How will you  
drive new  
technology  
stories?**





# Thank you!

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**State of the States**

In Intellectual and Developmental Disabilities

**KU** CENTER ON  
DISABILITIES