





# **#SMARTer Together**

June 11th

The Digital Divide During a Global Pandemic and Beyond



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# Digital Divide During the Pandemic and Beyond—*Case of Telehealth*

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# The Digital Divide

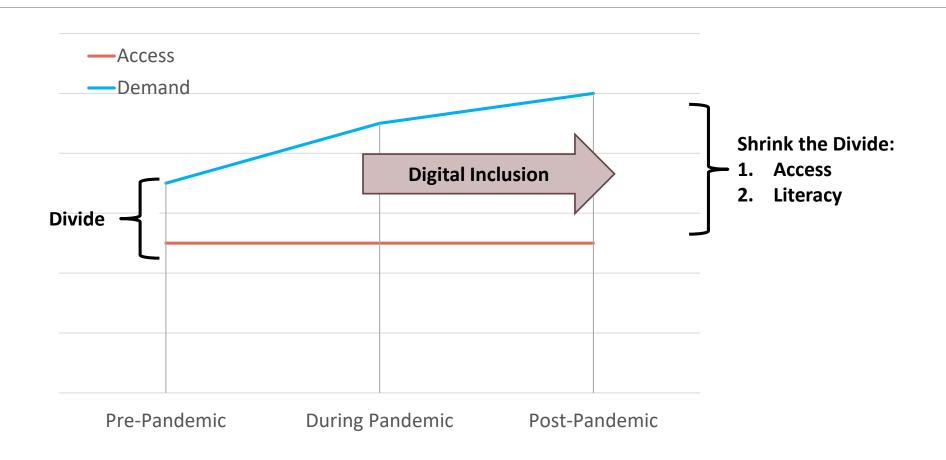
Digital Divide: the economic, educational, and social inequalities between those who have computers and internet access and those who do not

(Warshauer, 2004)



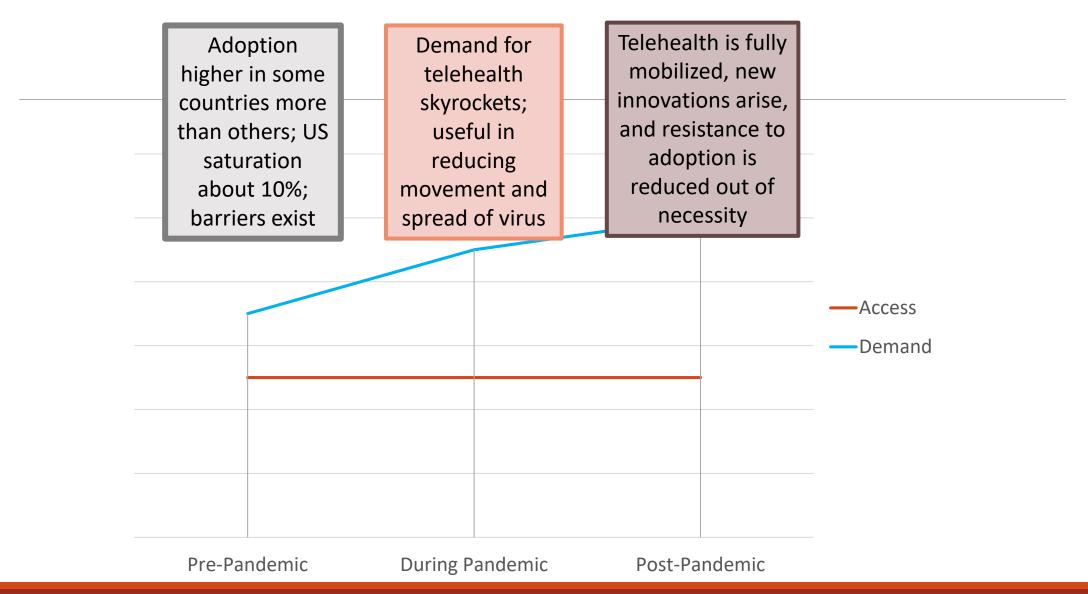
"Approximately half the world's population – 46 percent – is not connected to the internet according to United Nations estimates, despite the fact that internet access is considered a fundamental enabler of human rights..."

# Digital divide: Visualized\*



<sup>\*</sup> Expected trend if no intervention occurs for access; Not intended to be to scale but as a visual mechanism

# Digital divide: Telehealth application





# **Key Points**

- 1. The challenge of the digital divide has been highlighted during the pandemic by the accelerated reliance upon technology
- 2. Rapid response and resourcefulness cannot be replacements for infrastructure development
- 3. Telehealth is one example of how access to healthcare can be increased, with intervention on closing the digital divide
- 4. Efforts moving forward, as we innovate, as we adapt, will benefit from adding meaningful attention to digital inclusion (access + literacy)

# Thank you

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## Generational Divides: The Possibilities of Digital Inclusion

Lisa M. Coleman, Ph.D.

SVP, Global Inclusion & Strategic Innovation

New York University



#### **Taking Good Care**

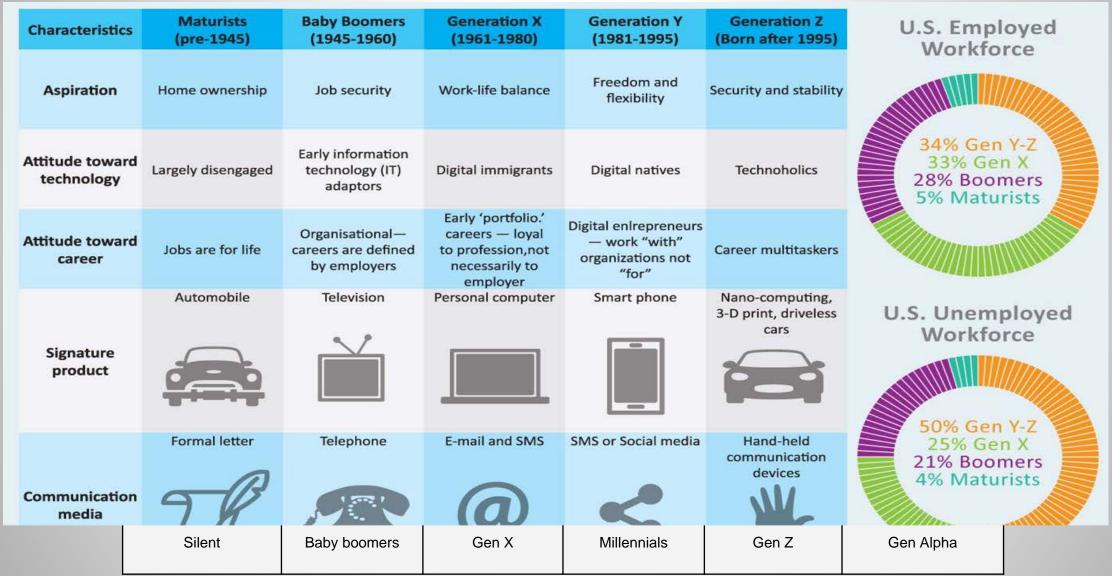
Thank you to our health care workers, volunteers, and all those helping on the front lines and behind the scenes - including sanitation, delivery, grocery workers.

Differential impacts people of African Descent, Asian descent, women, persons with disabilities, LGBTQ+, undocumented, etc.

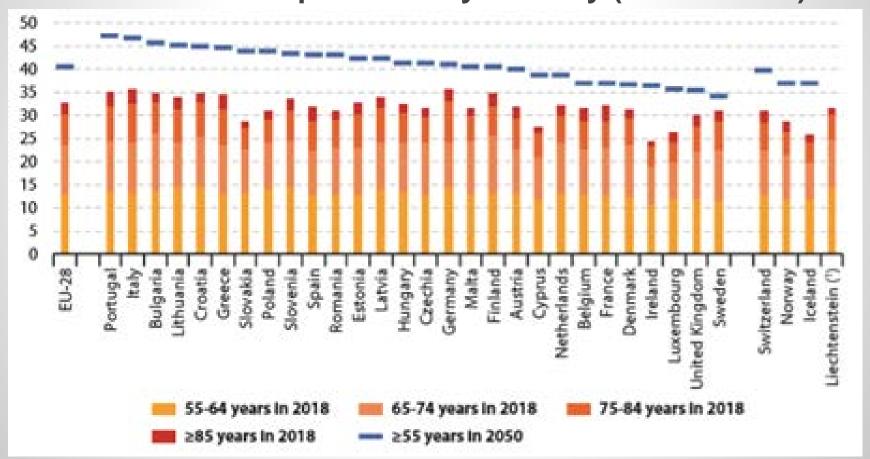
Social Distancing does not have to mean social isolation innovative. There are new forms of Social (& all forms of) Inclusion Together!

**Resources & Self-Care** 





#### Older Adult Populations by Country (2018 & 2050)



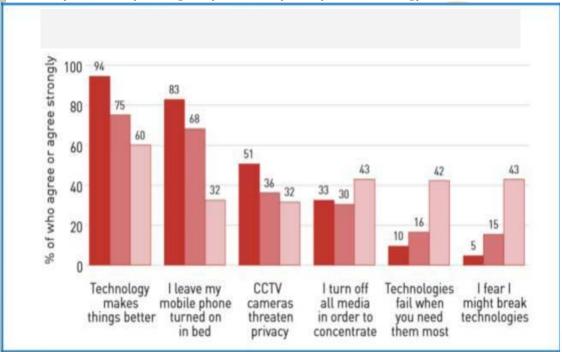
#### talent acquisition revisited

deploy new approaches for the battlefield

- · A new battlefield has been shaped by new global talent networks and social media
- · It is being defined by employment brands and changing views of careers

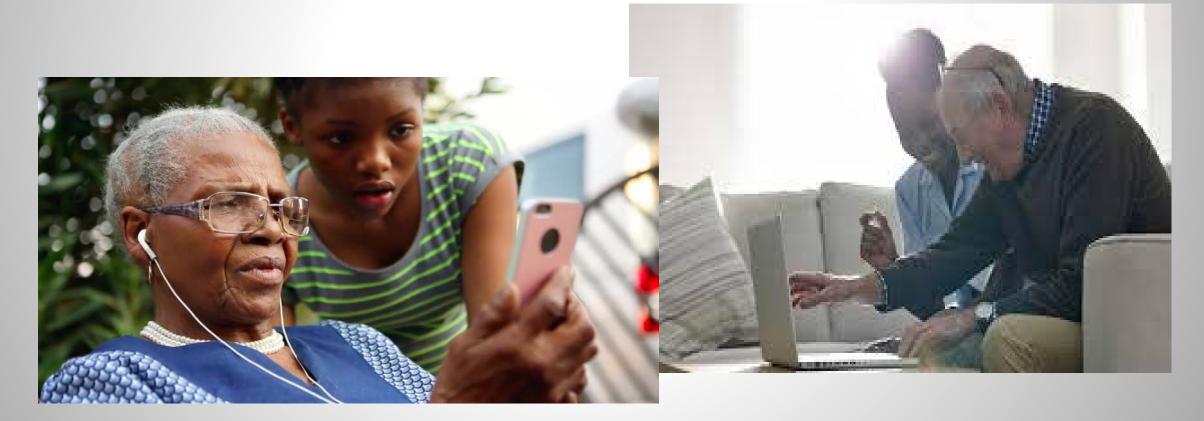
Most companies reviewing or changing sourcing and recruiting

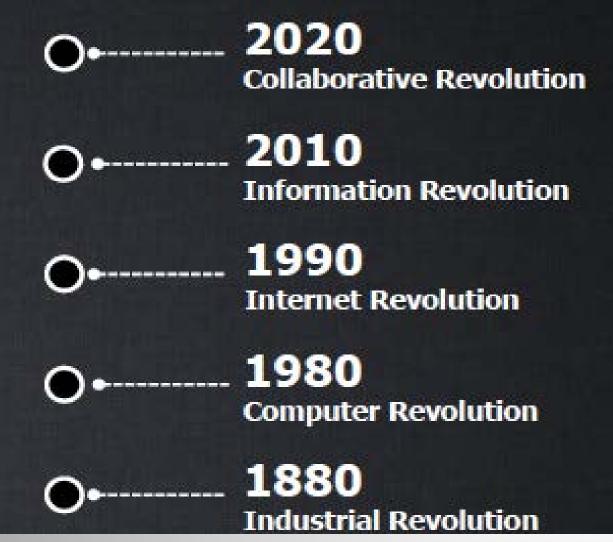
"When did you last revamp or reengineer your talent acquisition process and strategy?"





# **TransGenerational Digital Inclusion**





#### Deloitte's Point of View on the Future of Work 2. WORKFORCE Who can do the work? With new talent platforms and contracts, who can do the work? How do we leverage the continuum of talent from full-time, to managed services, to freelancers, gig workers, and crowds? Talent category 1. WORK 3. WORKPLACE Where is the work done? What work can be automated? With new combination of collaborative. With increasing robotics, cognitive, teaming, and digital reality technologies, and Al technologies, what work can be how are workplaces and work practices done by-and with-smart machine? reshaping where and when work is done. Current work options Automation level Physical distance Future work options

Source: Deloitte 2019

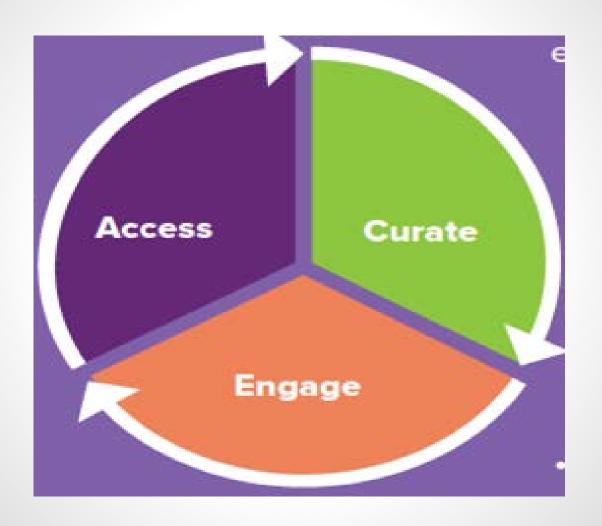


21,699 Respondents

-Collaborative -Sustainable -Digital

#### **NYU**

Female Founders
Al Institute
Aging Incubator
Entrepreneurial Labs







## **Historical & Strategic Alignment =**

- Design & Framing Asset, Learner (Growth), Universal
- + System, Digital, & Operational Alignment
- + Goal Alignment

new tools, methods to build global skills supply chain

> Leverage Global Diversity

we are entering a collaborative revolution

Leverage Digital
Natives, Literacy &
Fluency

understand the generational composition of your global workforce

Engage Innovation & Digital Entrepreneurship



Thank you! <a href="mailto:lisa.coleman@nyu.edu">lisa.coleman@nyu.edu</a>



# Closing The Digital Divide: Inclusion By Disruption

Dr. Shelton J. Goode, DPA

President and CEO, Icarus Consulting





What digital options are available to poor, working class, and people of color?

Can the poor, working class, and people of color access the digital options that are available?

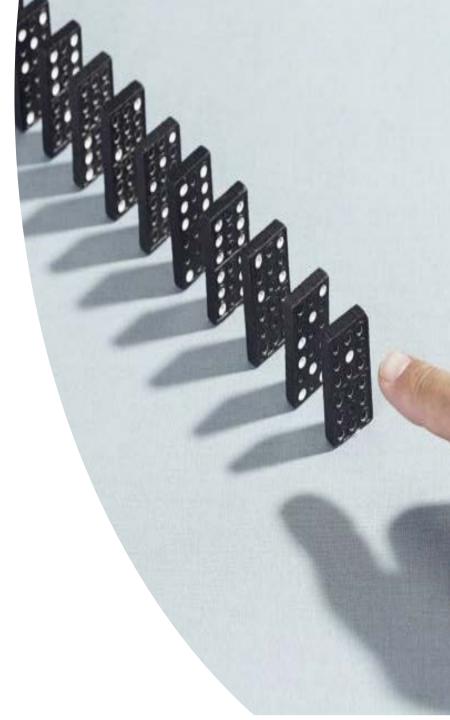
What is the quality of the digital options that are available to the poor, working class, and people of color?

Do the poor, working class, and people of color face bias, micro-inequities, or other barriers when they attempt to access the digital options that are available?



- The global crisis brought on by the coronavirus pandemic has pushed us further into a digital world.
- The coronavirus crisis has accelerated the development and adoption of digital solutions, tools, and services which is speeding up the global transition towards a digital economy.
- Those that do not have access are at risk of being left further behind as digital transformation accelerates.
- The pandemic has also exposed the wide chasm between the connected and the unconnected, revealing just how far behind the poor, working class, and people of color are in digital readiness.
- The poor, working class and people of color are the most vulnerable to the human and economic consequences of the pandemic, and they also lag farthest behind in digital readiness.

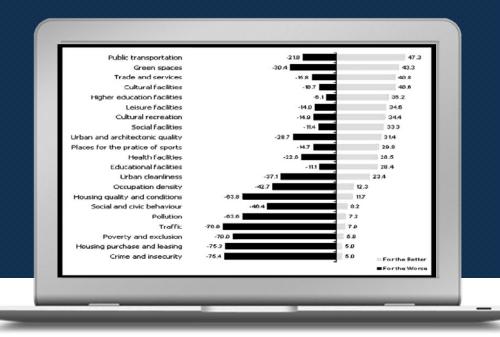
- The pressing issue is figuring out what the poor, working class, and people of color will do when they do not have reliable high-speed internet access.
- The digital landscape has not really changed for the poor, working class, or people of color since the last major global calamity the 2008 financial crisis.
- Inequalities in digital readiness hamper the ability of large parts of American society to take advantage of technologies that help us cope with the coronavirus pandemic by staying at home.
- This situation has significant development implications that cannot be ignored. We need to ensure that we do not leave behind those who are less digitally equipped in a post pandemic world.





- ■There are positive trends emerging from the crisis that show the potential of the pandemic to digitally transform companies and communities, and country.
- In an effort to contain the coronavirus pandemic, businesses and governments have moved their operations and services online to limit physical interaction.
- ■Digital platforms are also thriving as consumers seek entertainment, shopping opportunities and new ways of connecting during the crisis.
- ■Digitalization has facilitated the proliferation of telemedicine, telework and online education.
- ■Emerging digital platforms are generating critical data on the virus and facilitating the exchange of research information.
- ■There has been a leap in teleworking and online conferencing, amplifying the demand for software like Teams, Skype, Webex, Go-To-Meeting, Blue Jeans, Slack, Zoom, etc.
- According to Big Tech companies like Microsoft, Cisco, Google, the number of people using their software for online collaboration has climbed nearly 40% since the start of the pandemic crisis.

### Methodology: Surveyed 13,348 LinkedIn Connections











Asked them to share perceptions about the impact of the pandemic on the poor, working class, and people of color in the four areas identified above.



# **FINDINGS**





#### No Access...

Only one in five people in Georgia's 92 rural counties have access to the Internet.



#### **Economic Exclusion**

In half of Georgia's rural counties, only 5% of the population currently buy goods or services online.



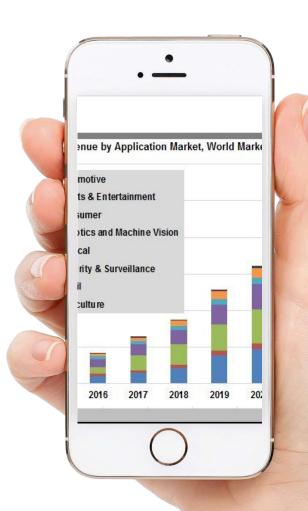
#### **Follow The Money**

Mobile data costs in some areas exceeds the monthly food budget for the poor, working class and people of color.



#### Too Slow - Too Bad!

Over 62% of poor communities have low broadband quality which hampers their ability to use current digital tools and applications.



Colleges and universities who closed their campus libraries and computer labs, did so without a plan to help students who do not have internet access or who face other issues with remote learning.

In large metro areas with the greatest number of confirmed cases of coronavirus, public libraries and cafes closed.

For students from low-income backgrounds, attending virtual lectures and doing homework online was not just inconvenient, but almost impossible.

Public libraries in metro areas hit hardest by the pandemic closed, which essentially eliminated a place for the poor, working class, and people of color to access the internet without cost.

It's the most marginalized people who are feeling the pandemic most intensely, and steps have to be taken to ensure equitable solutions are implemented.





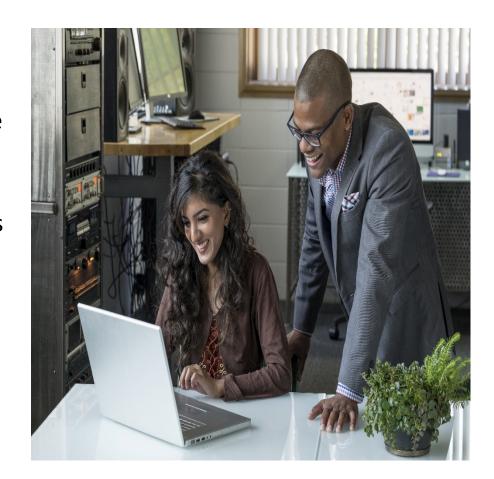
The coronavirus pandemic has exposed fractures in the digital ecosystem that can be turned into opportunities.

More cities should follow Atlanta's lead and explore e-commerce and other digital solutions that can help build local resilience to future global disruptions

The main public policy takeaway from this very limited analysis is that much more attention should be given to bridging existing and emerging digital divides to allow more poor and rural communities to take advantage of digitalization.

New policies and regulations are needed to ensure a fair distribution of the gains from the disruptions caused by the pandemic.

If left unaddressed, the gap between under-connected and hyper-digitalized communities will widen, thereby exacerbating existing inequalities.



The digitally enabled world is working for some, but not equally or equitably for all.

Consequently, not everyone is ready to embrace a more digitized existence.

The consequences are likely to have lasting effects when the economy starts to pick up.

Those that do not have access are at risk of being left further behind as digital transformation accelerates.

The poor, working class and people of color are the most vulnerable to the human and economic consequences of the pandemic, and they also lag farthest behind in digital readiness.



## **CONTACT INFORMATION**





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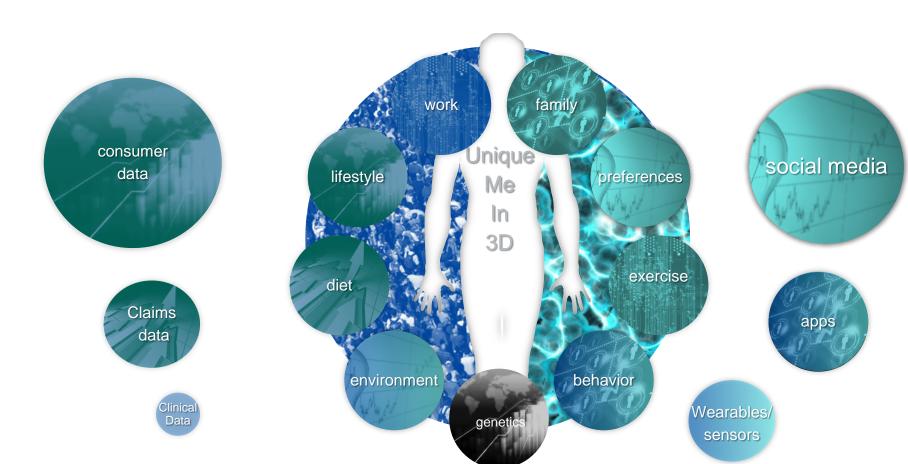


# DIGITAL DIVIDE: IMPLICATIONS FOR LIFE SCIENCE INDUSTRIES KALAHN TAYLOR-CLARK, PHD, MPH

WEBINAR:THE DIGITAL DIVIDE DURING A GLOBAL EPIDEMIC
#SMARTERTOGETHER
JUNE 11, 2020

# VIEWS EXPRESSED ARE STRICTLY MY OWN, AND ARE NOT REPRESENTATIVE OF MY COMPANY

#### Patient Generated Health Data in the Development Process



# Impact of Digital Divide:

- ✓ Slow clinical trial recruitment
- ✓ Improve patient centered trial design via "crisis management" necessity
- ✓ Need for (validated) behavioral and environmental evidence

#### NEXT STEPS FOR RESEARCH AND ACTION

- Invest in digital patient support programs that address the needs of underserved populations
- Track and report digital health access and usage across SES categories to prevent worsening divides
- Focus on patient and HCP training in the deployment of new technologies, especially as it relates to security and privacy
- Develop workflows that allow clinical teams to engage with diverse patients across digital health platforms, such as telehealth.

#### Sources

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# THANK YOU!

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# **#SMARTer Together**Webinar Series



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