Equity and the Under Connected

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Connecting Communities

The world is a connected place. In order to be included, people need Internet Access, Computer Devices, and Digital Literacy ("The 3-legged stool)

Large portions of Cleveland's population do not have access to computers, or have no access to broadband Internet

No! Having a smartphone is NOT the same as having consistent broadband access

EmpowerCLE+ is Connecting Cleveland Communities (DigitalC)

\$18/month for reliable, consistent, broadband



Connected health is the future of healthcare

Telemedicine has suddenly become "normal", thanks to social-distancing guidelines

Full potential of health technology requires a focus on *continuity of care*

- Home, in-patient, rehabilitation, long-term care
- Sensors and systems to measure and monitor patient information

The future healthcare workforce needs facility with this continuum



Smart manufacturing is the future of manufacturing

The manufacturing supply chain has been disrupted

Re-shoring manufacturing cannot simply mean bringing back the "traditional" factory floor

Need broad adoption of "smart manufacturing" technologies such as Industrial Internet of Things and automated data exchange

Re-engineering the factory floor as well as the talent that occupies such a factory floor

Riding the fourth wave to economic transformation



Technology is the future of service delivery by governments and nonprofits

Government and Nonprofit services are moving online

- People in government need to understand how best to create and deliver services online
- Residents in communities need to be able to access services in an equitable manner

The specific kinds of technology that are being adopted need to be thought through

Technology-based services need to be in the public interest

Riding the fourth wave to economic transformation



Human-centered design must be the future of digital transformation

The design of the digital transformation has to have human society at its core

Security and Privacy of data that is collected

How are the needs of the individual balanced against the needs of the collective?

Algorithms are inherently biased

- Results from algorithms are biased by the datasets and data sources
- Biases originate in the people who are creating these algorithmic systems

Riding the fourth wave to economic transformation

Defining and developing talent in the future population



"Two-thirds of our elementary students today will engage in jobs that we have not even envisioned yet!" -- Mitch Resnick, MIT Media Lab

CSforCLE has introduced high quality computer science courses into half of all Cleveland public schools

- All students have equitable access to these courses
- Computational literacy is a *basic* need/skill required of *all*
- Lessons presented in a culturally relevant and inclusive manner