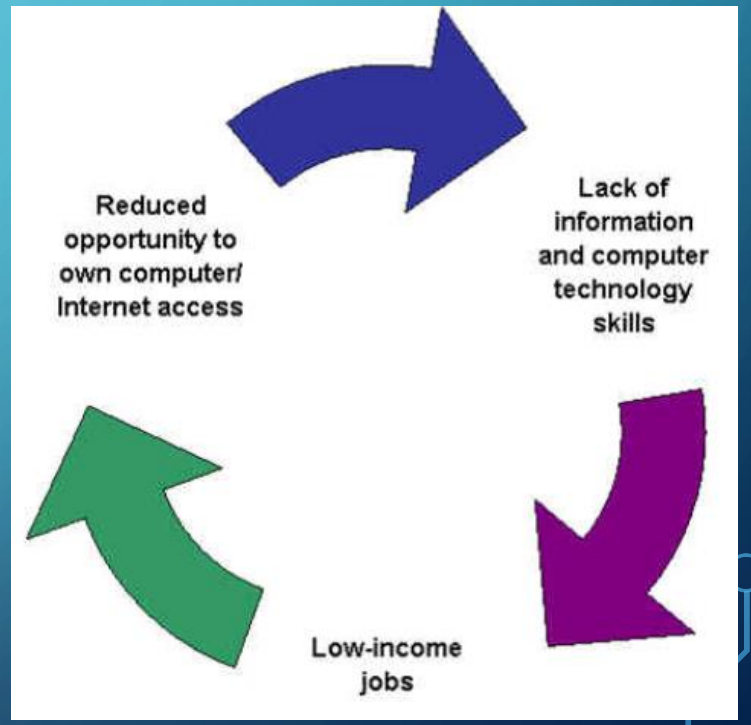
MIND THE GAP: HOW TO NAVIGATE YOUR WAY ACROSS THE DIGITAL DIVIDE

(AND WHY THAT ISN'T AS EASY AS IT SOUNDS)

THE DIRECT RESULT OF A DIGITAL DIVIDE

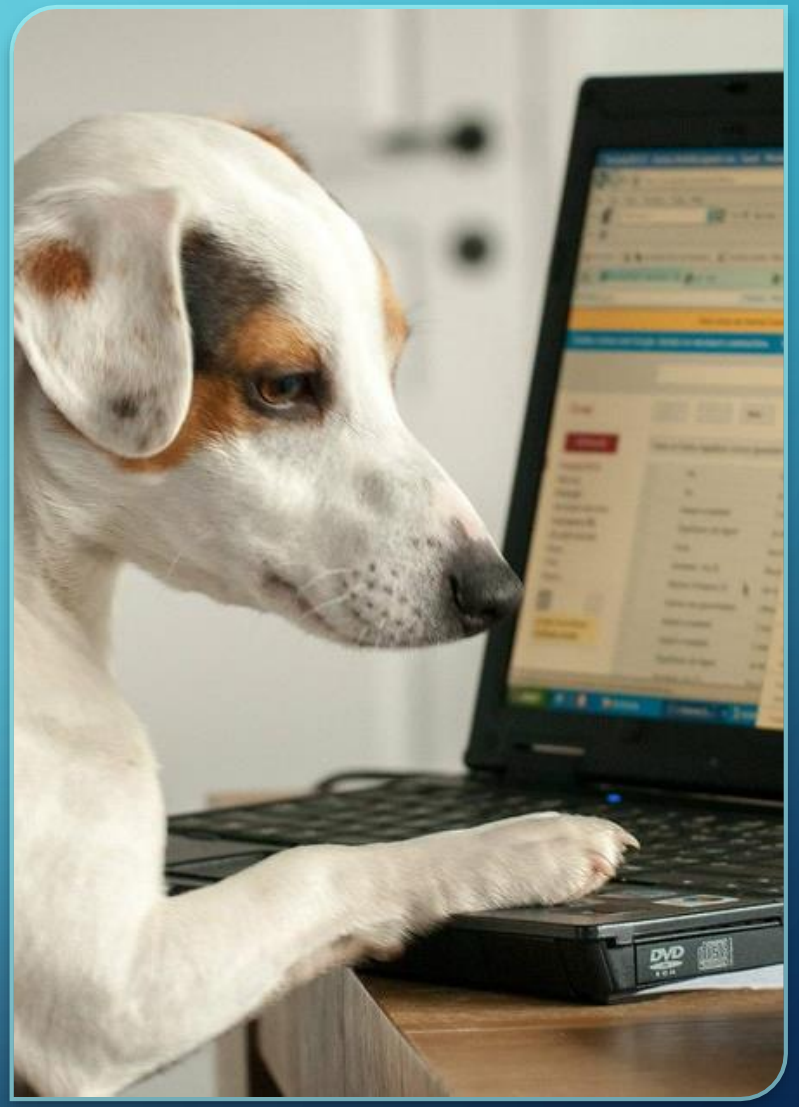
3 million American children do not have home internet access and consequently cannot finish homework. The resulting gap leads to a vicious cycle.



DO YOU CONSIDER YOURSELF A DIGITAL EXPERT?

Why?

Why Not?



THE TRUE DIVIDING LINES: RACE, GEOGRAPHY, INCOME AND AGE

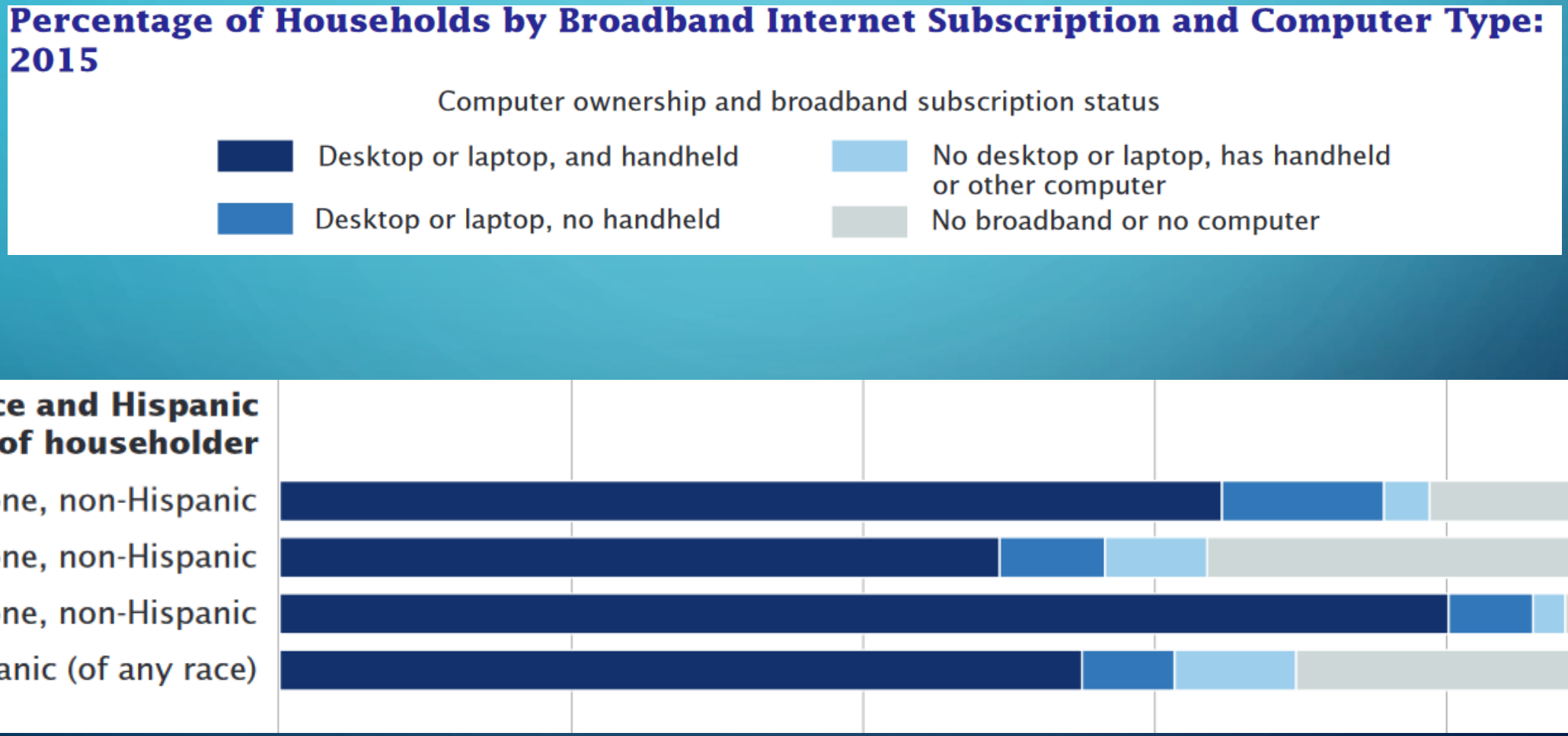
INTERNET ACCESS AT HOME ACROSS THE US

Wisconsin	76.9	0.4
District of Columbia	76.8	1.4
UNITED STATES	**76.7**	**0.1**
Idaho	76.7	0.9
North Dakota	76.3	1.0

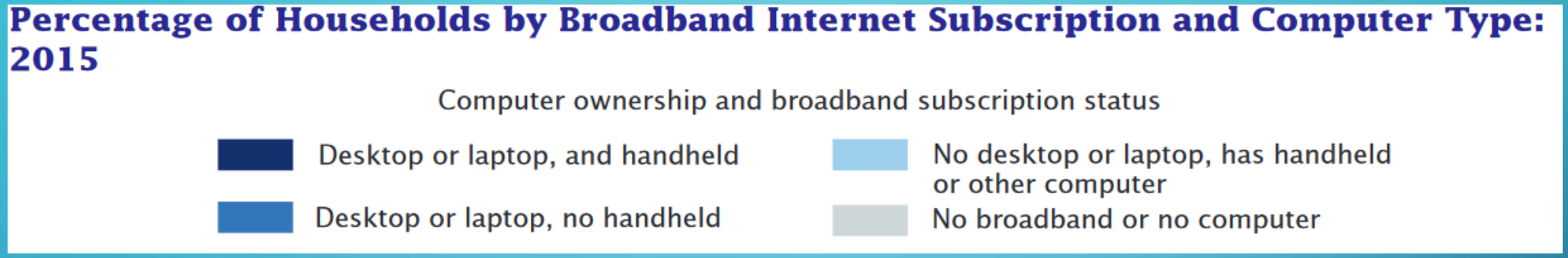
1 out of every 4 people in Wisconsin do not have internet access at home (as of 2017): https://www.census.gov/content/dam/Census/library/publications/2017/acs/acs-37.pdf

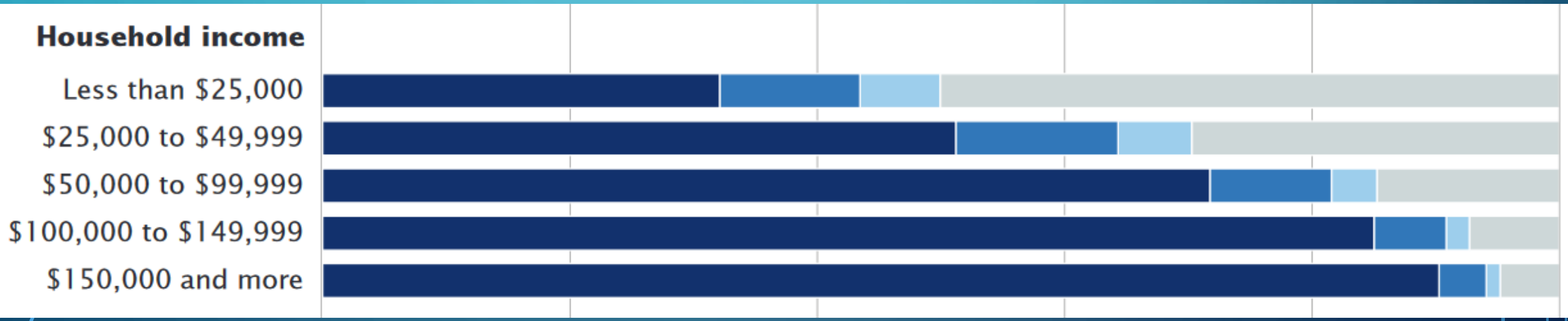
Geographical area	Percent	Margin of error (±)[1]
New Hampshire	84.5	0.7
Washington	83.9	0.4
Utah	83.1	0.7
Colorado	83.0	0.4
Massachusetts	82.6	0.4
Hawaii	82.2	0.9
Connecticut	82.0	0.6
Alaska	81.7	1.3
New Jersey	81.6	0.3
Maryland	81.4	0.4
California	81.3	0.2
Oregon	80.8	0.4
Minnesota	79.5	0.4
Nevada	79.0	0.6
Vermont	78.7	1.1
Virginia	78.6	0.4
Rhode Island	78.2	1.1
Arizona	78.1	0.4
Nebraska	78.1	0.5
New York	77.8	0.2
Wyoming	77.8	1.3
Florida	77.5	0.2
Delaware	77.4	1.1
Maine	77.1	0.7
Illinois	76.9	0.3
Wisconsin	76.9	0.4
District of Columbia	76.8	1.4
UNITED STATES	**76.7**	**0.1**
Idaho	76.7	0.9
North Dakota	76.3	1.0
Kansas	76.2	0.5
Ohio	76.1	0.2
Pennsylvania	75.7	0.3
South Dakota	75.3	1.2
Iowa	75.0	0.5
Montana	75.0	1.0
Georgia	74.8	0.4
Michigan	74.4	0.3
Texas	74.3	0.2
North Carolina	74.1	0.4
Indiana	73.3	0.4
Missouri	73.3	0.4
Kentucky	70.9	0.6
Oklahoma	70.8	0.5
Tennessee	70.2	0.4
South Carolina	69.9	0.5
West Virginia	69.8	0.8
Louisiana	68.7	0.6
Alabama	68.3	0.5
New Mexico	67.2	0.9
Arkansas	64.2	0.5
Mississippi	61.0	0.8

THAT RATE GOES DOWN FOR (MOST) MINORITIES



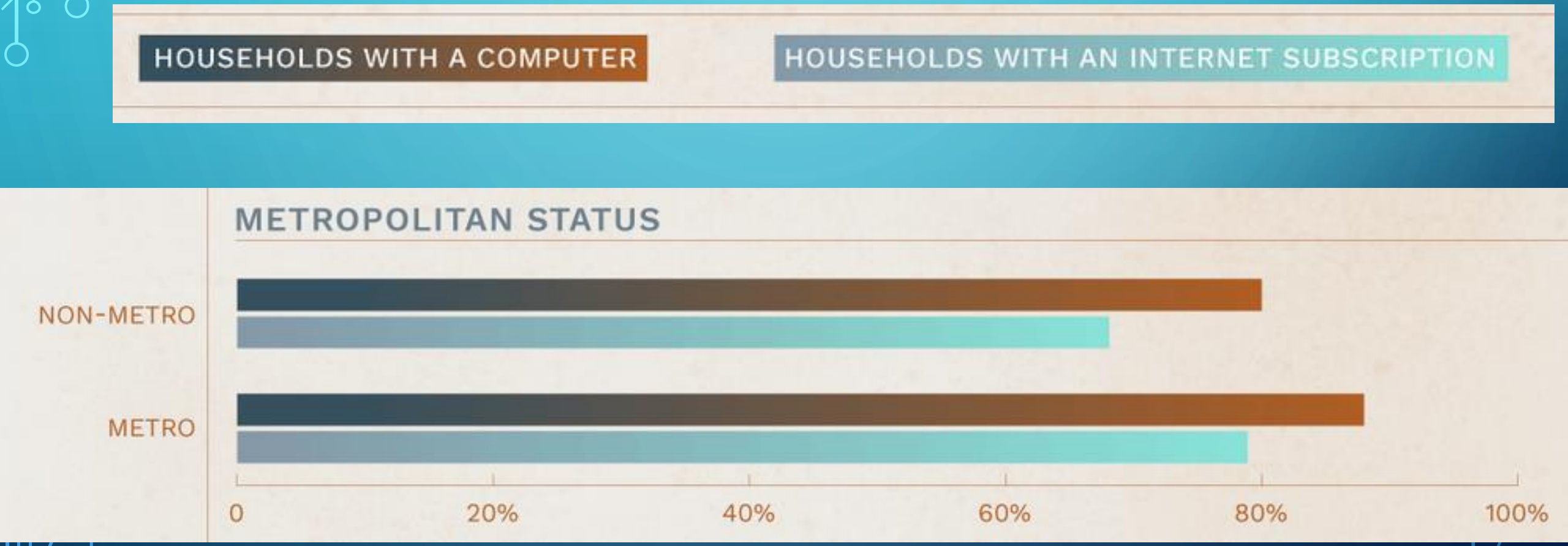
THE RATE IS EVEN OBVIOUS WHEN IT COMES TO INCOME





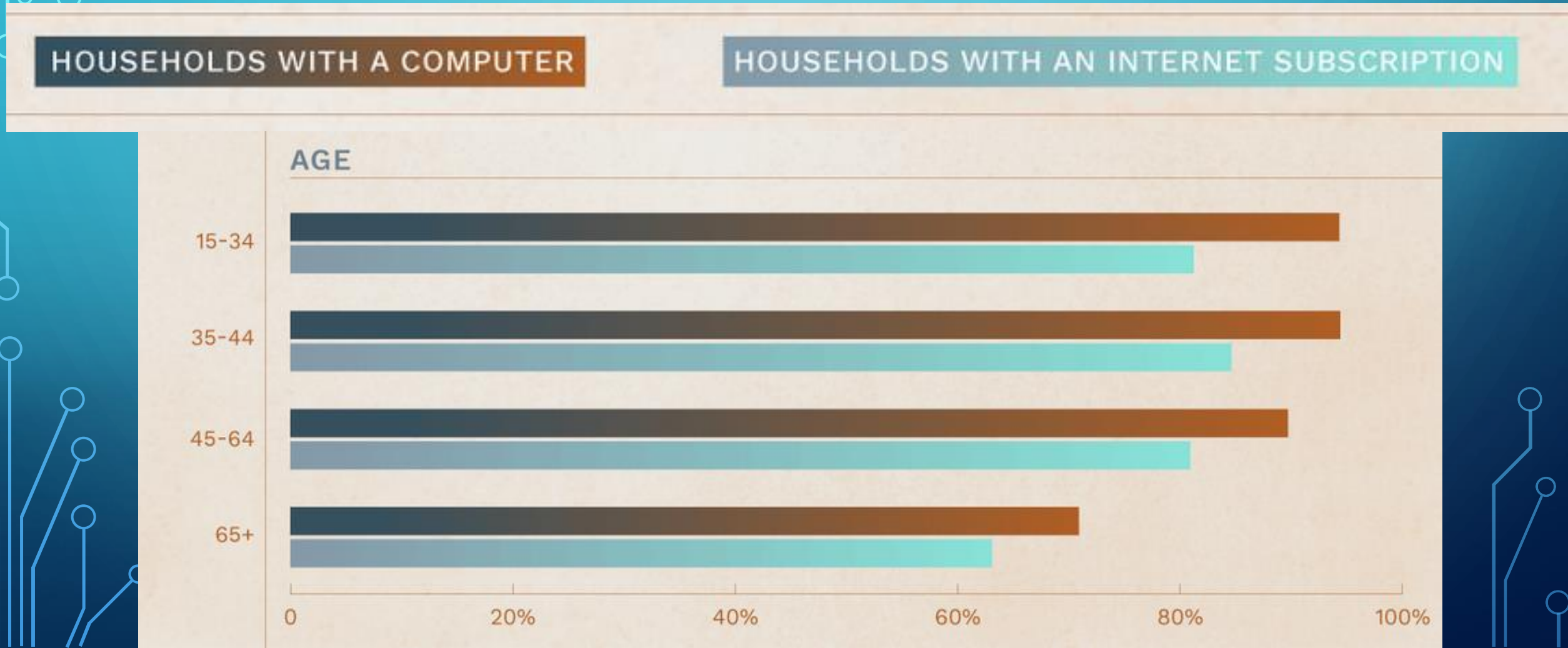
https://www.pewresearch.org/fact-tank/2019/05/07/digital-divide-persists-even-as-lower-income-americans-make-gains-in-tech-adoption/

METRO V. RURAL ACCESS



https://morgridgeonline.du.edu/blog/libraries-bridge-digital-divide/

AGE (IF THE HOUSEHOLD CONTAINS SOMEONE YOUNG OR NOT)



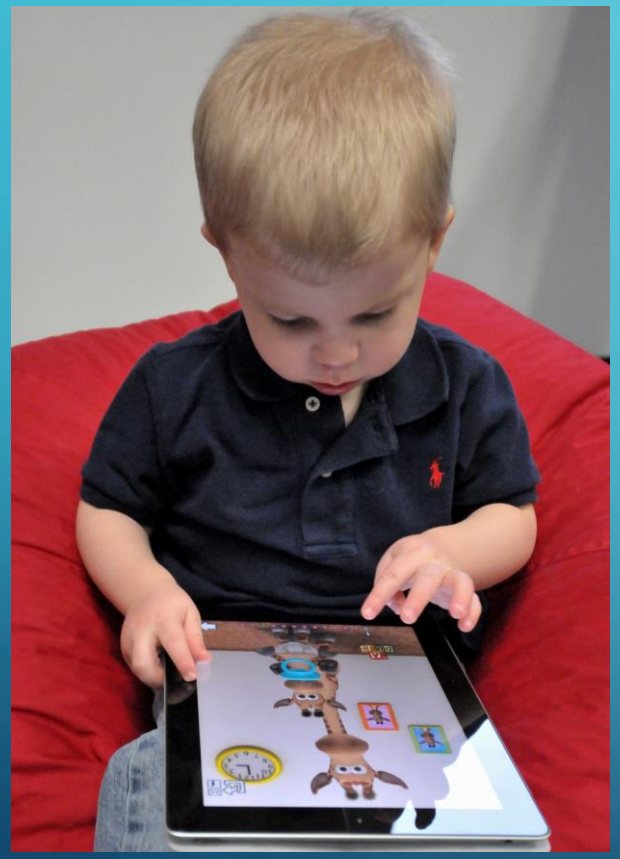
TAKEAWAYS FROM THE DIGITAL DIVIDE DATA

- Data bears out gut instinct and anecdotal evidence:
  - The older the household, the less likely there is digital technology.
  - The more rural, the less likely there is digital technology.
  - For minorities, there is generally less access to digital technology at home.
  - The less money brought into the home, the less likely they are to have access.

Larger social forces at work here – social issues, class divides, and the age-old country v. city divide in terms of access. There is no need to be political here – the problem is rampant enough that it should not require 'taking a side'.

AGE – DIFFERENT STRATEGIES FOR BRIDGING THE DIVIDE FOR DIFFERENT GENERATIONS

WHAT ARE WE BRIDGING BETWEEN?



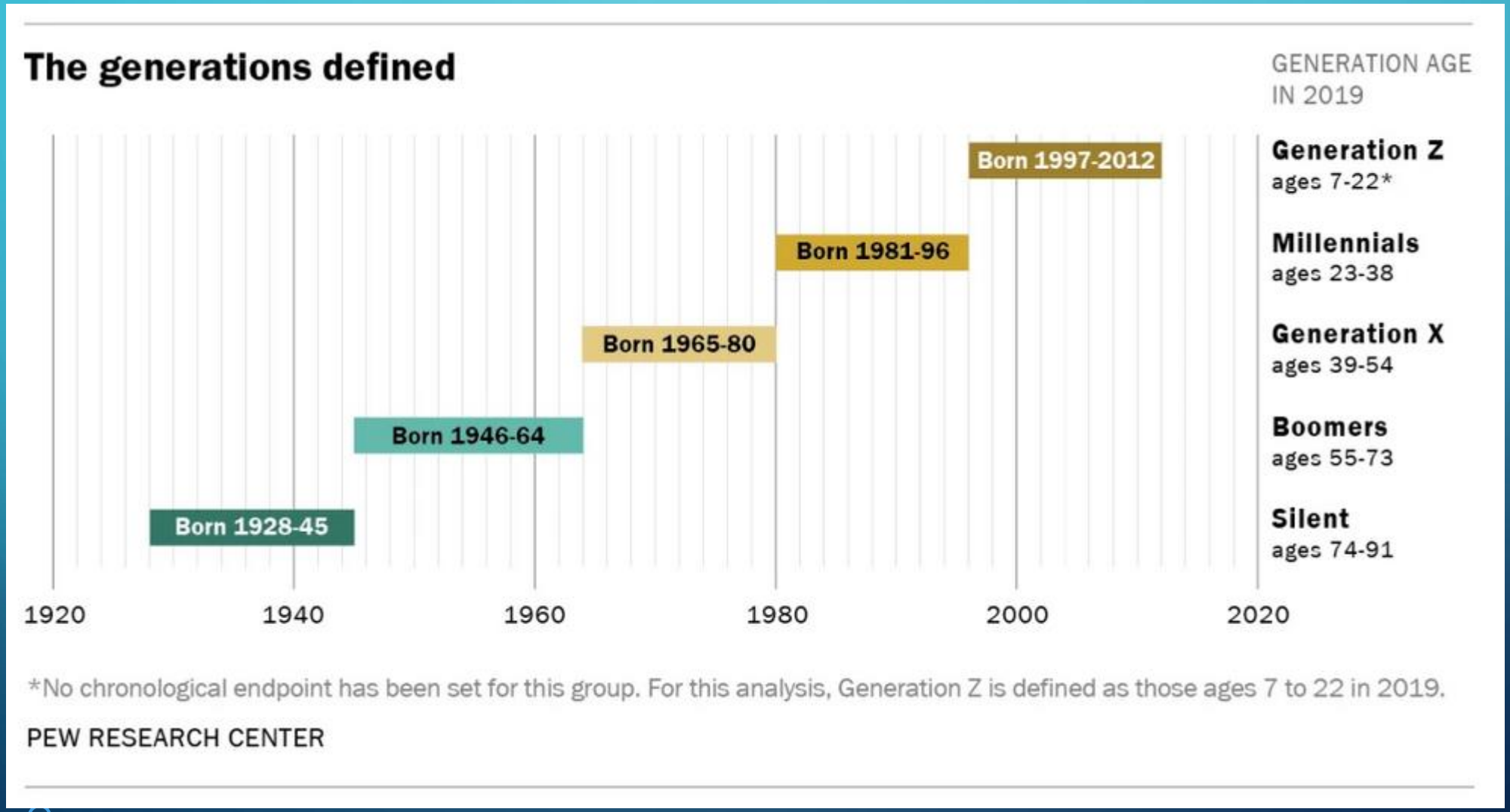
Digital Native

Digital Immigrants

BEFORE WE CAN GO FURTHER WITH THE TECHNOLOGY, WE NEED TO GO DEEPER WITH THE PEOPLE WORKING WITH IT

(OR; A BRIEF GENERATIONAL OVERVIEW)

BREAKDOWN OF THE GENERATIONS



https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/

SILENT GENERATION

The Silent Generation *adapted* technology.

Often, technology was writ large in their early lives (think nuclear bombs, building the Hoover Dam)

More generally, characteristics include a respect for competence and for authority.

If things are orderly and make sense, more likely to agree with and comprehend training.

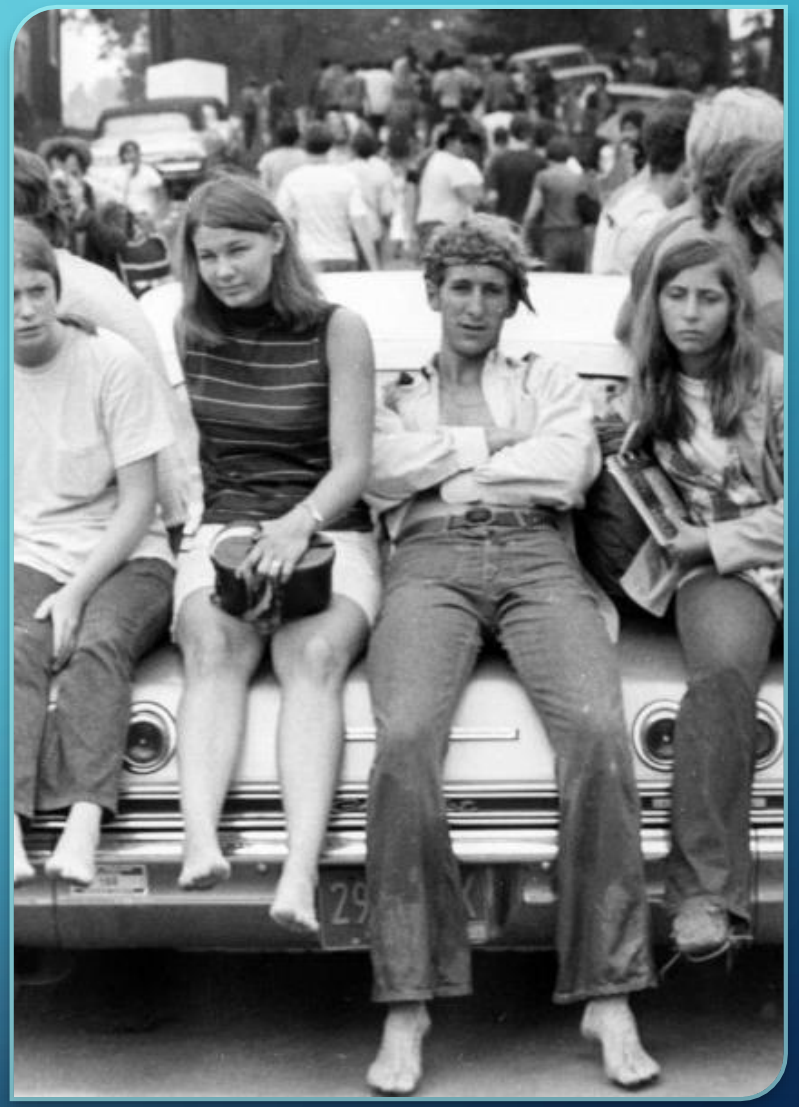
BABY BOOMERS

Boomers *acquired* technology.

Technology, as Boomers were growing up, was moving more and more into the home (television, microwaves, etc.)

More generally, characteristics include a strong (and strong-willed) work ethic and a balance between challenging authority and being impressed by authority.

If the objective is clear, Boomers will work hard to achieve it, but may resist change if it conflicts too much with expectations regardless of the change.



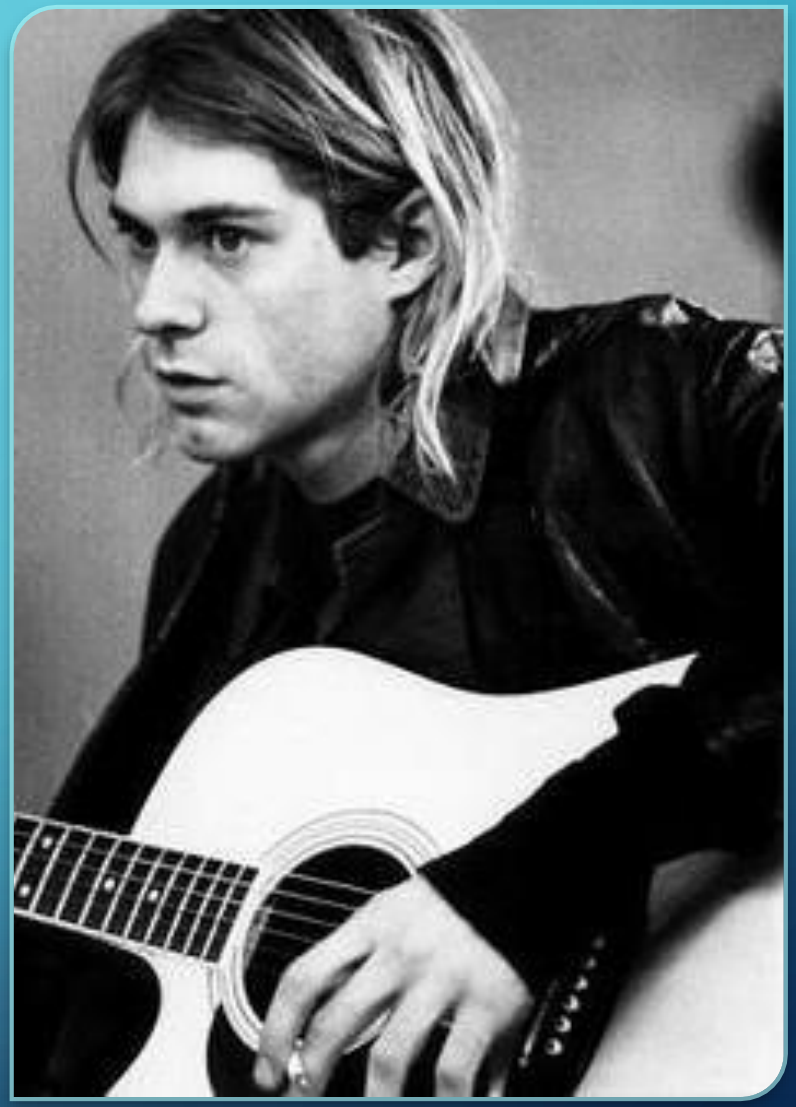
GENERATION X

Generation X *assimilated* technology

Technology was increasingly hand-held, moving to PDAs, cellphones and Gameboys.

More generally, Gen X is distrustful of traditional structures and authority, which extends to jargon and work that doesn't produce results.

Optimism doesn't come easily, so Gen Xers will instead usually try to figure things out their own way.



MILLENNIALS

Millennials *integrated* technology.

Tech has now moved beyond even hand-held devices – the streaming devices, the cloud, smart homes, etc.

Millennials are generally known for asking questions, and expecting to have their voices heard (and perhaps 'earning' participation trophies)

Tech will come naturally to them, but just how deep that knowledge goes remains unclear.

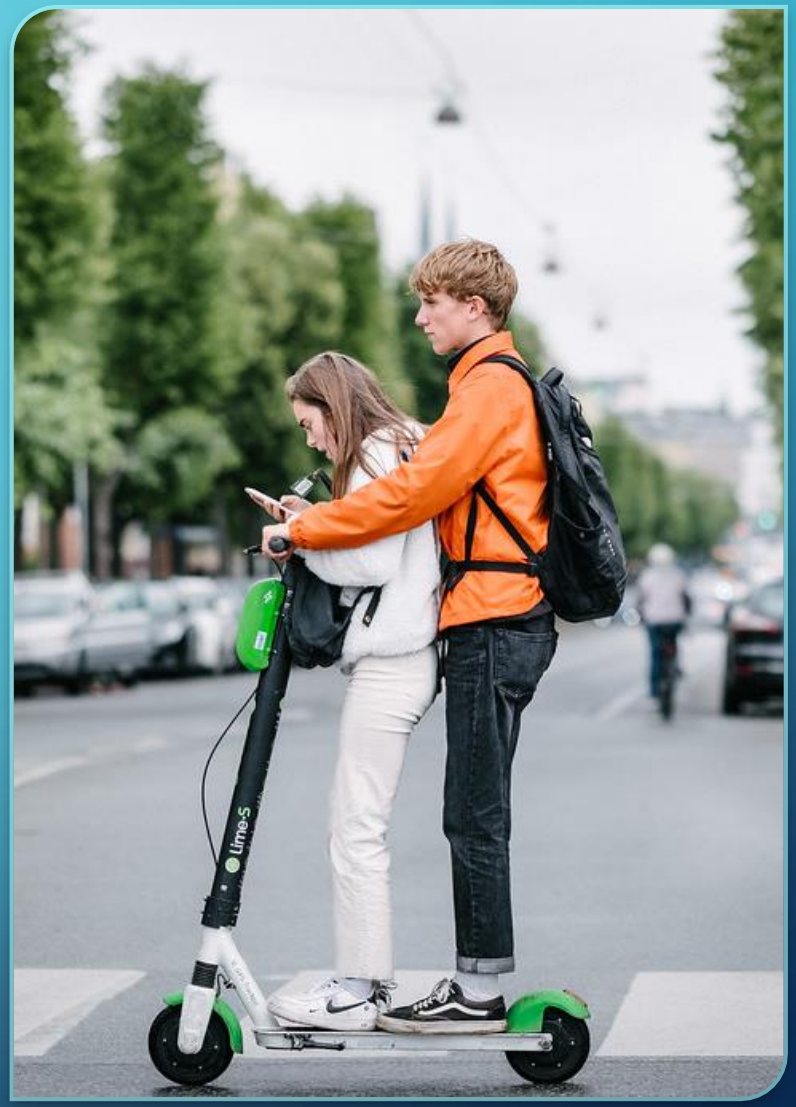
GENERATION Z (ZOOMERS)

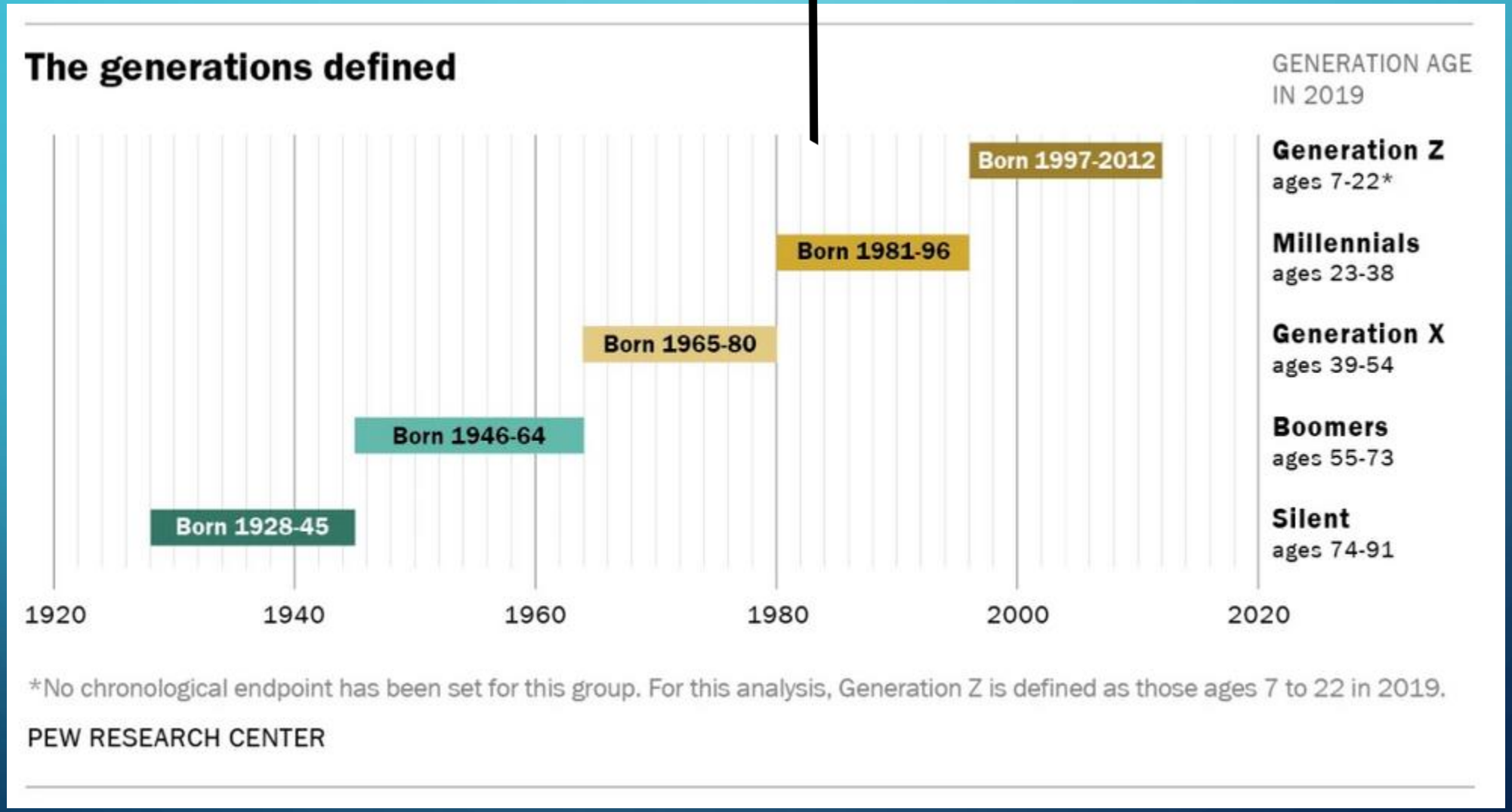
Generation Z *expects* technology.

Technology is omnipresent for a Gen Z to the point where when it isn't there, it is very obvious.

More generally, Gen Z is active in social justice causes, expects change and may not be willing to wait (though it is very early to assign even these very broad characteristics).

Generation Z, much like Millennials, will be able to quickly pick up and understand how technology works on an end-user level. How deep that knowledge goes remains a mystery.




The generations defined
GENERATION AGE IN 2019
Born 1997-2012
Born 1981-96
Born 1965-80
Born 1946-64
Born 1928-45
Generation Z
ages 7-22*
Millennials
ages 23-38
Generation X
ages 39-54
Boomers
ages 55-73
Silent
ages 74-91
1920
1940
1960
1980
2000
2020
*No chronological endpoint has been set for this group. For this analysis, Generation Z is defined as those ages 7 to 22 in 2019.
PEW RESEARCH CENTER

NOW WE KNOW WHERE THE DIVIDE EXISTS, WHAT DO WE MEAN BY DIGITAL?

TECHNOLOGY DEFINED

Merriam-Webster: a manner of accomplishing a task especially using technical processes, methods, or knowledge.

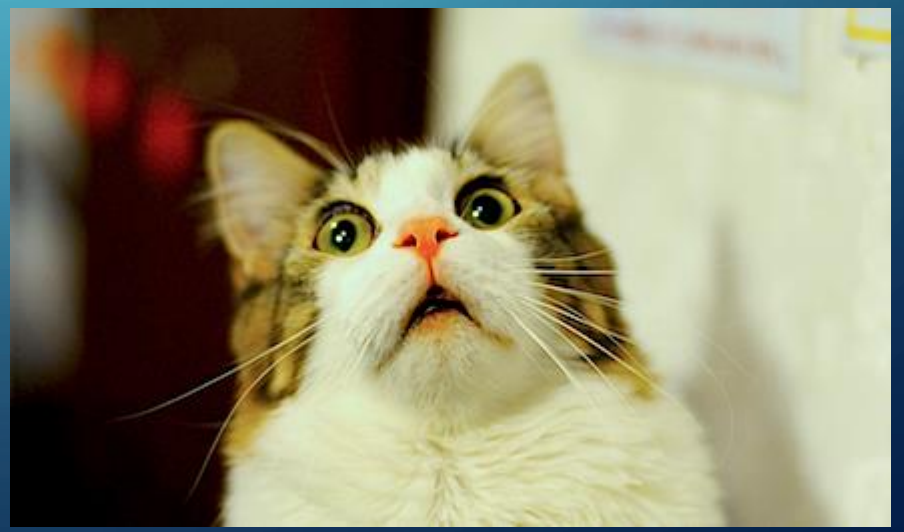
Specifically, tech characterized by electric and computerized enhancements and requirements.

https://www.washingtonpost.com/graphics/2017/entertainment/tech-generations/

SNAPSHOT OF TECHNOLOGY TODAY

TECHNOLOGY CONTINUES TO CHANGE AT A RAPID PACE

- Moore's Law: Computer power doubles every…
  - 18-24 months (though there has been stagnation recently)
- Digital Universe expansion: Doubles every…
  - 24 months (going from 33 zettabytes in 2018 to 125 zettabytes in 2025)
- Gilder's Law: Communication ability (bandwidth) doubles every…
  - 12 months, closely related to computing power development



TECHNOLOGY

"Technology is not technology if it was invented before you were born"
~ Sir Ken Robinson

WHAT ARE THE DIFFERENCES BETWEEN DIGITAL NATIVES AND IMMIGRANTS?

THE CLAIMS

1. Digital Natives favor digital interaction over social interaction and consequently have less developed social skills.

2. Due to constant technological exposure, Digital Natives are better at multitasking.

3. Digital Natives inherently understand how to fix hardware and solve other technological problems.

THE REBUTTALS

1. Digital interaction is not a replacement – it is a supplement. Digital Natives still seek human support and help as needed…there are just other options out there that they are familiar with.

2. Deadly difference in multitasking proficiency and merely choosing to multitask. Digital Natives still fall victim to cognitive overload. There is little evidence to suggest that Digital Natives have an advantage in multitasking.

3. Big difference between fast-paced digital interactions and deeper questions about fixing or understanding technology. Digital Natives sometimes tend to make more errors due to their ability to navigate digital technology quickly.

Possibly the biggest difference? Confidence. Digital Natives blame the technology, Digital Immigrants blame…themselves.

THE DIFFERENCES LIBRARIANS CAN FOCUS ON

DIGITAL NATIVES

- Confident…perhaps too confident.
- Very capable with basic and fast navigation of 'typical' technology.
- Early adopters
- 'Horizontal viewpoint' – egalitarian sharing.

DIGITAL IMMIGRANTS

- Less sure of themselves with new digital tech.
- Deliberate and careful with 'typical' technology.
- Generally more reluctant to change.
- 'Vertical viewpoint' – more hierarchical in the way the world works.

GENERATIONAL DIVIDE: WORSE THAN EVER?

Participation Trophies vs. “OK Boomer”

"[A] generation, numbering in the millions,[that] has gone so far in decay that it acts without thought of social responsibility…The Lost Generation is even now rotting before our eyes."

1936 – Harper’s Monthly

HOW TO BRIDGE THE DIVIDE: LIBRARY TIPS AND TRICKS FOR EFFECTIVE TECH TEACHING, OUTREACH AND SUPPORT

OR; HOW TO FIX SOCIETY

REACHING THE POPULATIONS IN NEED

- Finding partners that already have connections with the community.
  - Neighborhood centers
  - YMCAs
  - Schools
  - Local businesses/restaurants
  - Local group meetings – FFA, Elks Club,VFWs, Senior Centers
  - Other examples?

CREATE A WELCOMING ENVIRONMENT TO THOSE ON THE WRONG SIDE OF THE DIVIDE – MINORITIES, RURAL POPULATIONS, LOWER INCOME FAMILIES

- Librarians tend to be highly trusted by everyone – take advantage of our reputation.
- Reach out to these communities specifically– bring their voice into the library to create a more welcoming environment (and perhaps develop cultural competence)
- Educate on policies affecting the divide – like net neutrality or
- Use your collection to pivot towards resources that will draw in new crowds.
- Other possibilities:
  - Doing away with overdue fines?
  - Hiring minority staff/look for volunteers from the communities
  - Shift your library's mission – focus on those in need as opposed to everyone?

REACHING THE PEOPLE…CONTINUED

Marketing and branding – not just the value of the libraries, but the value of digital technology.

24% of adults in rural areas see lack of broadband internet as a major problem…34% see it as a minor one: https://www.pewresearch.org/fact-tank/2018/09/10/about-a-quarter-of-rural-americans-say-access-to-high-speed-internet-is-a-major-problem/

Not enough to wait for patrons to come to you – To grow your patron base, you must go to them.

LIBRARY PHILOSOPHY AND INVESTMENT

What to own? Is it worth the cost?
What if it is just a fad?
Advantages to waiting…advantages to buying:
- Impacts your…
  - Budget
  - standing in the community
  - staff training

Is software the better investment?
- Are patrons bringing their own hardware?
- Should you be a petting zoo or a veterinarian office?

HAVE A TECHNOLOGY PLAN – MAKE YOUR LIBRARY SHINE

Strategically plan out library space reserved for technology.

Keep your technology healthy and updated

Pick your battles…which technology do you want to exhibit?

Get creative – check out tech, tech clubs, makerspaces

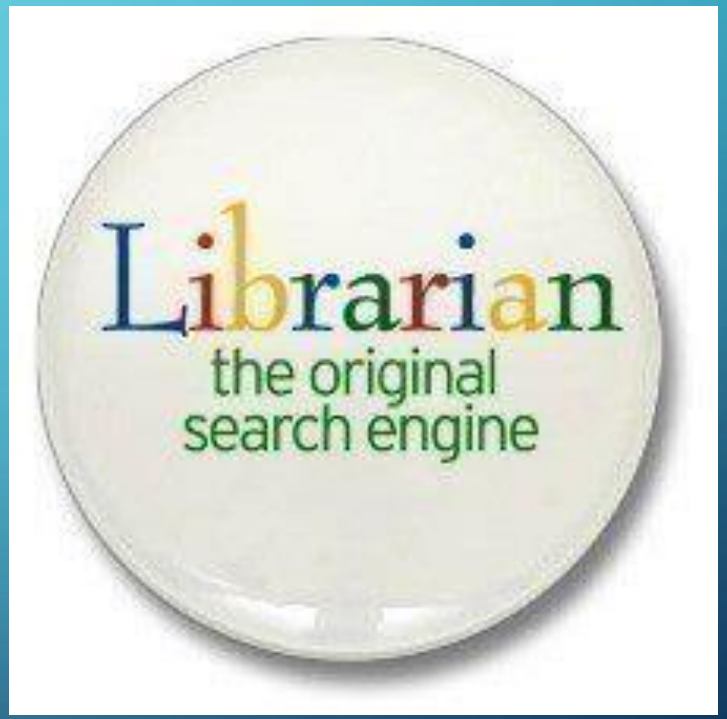
Remember security – limits on programs, invest in anti-virus tech?

This sounds like a lot of money – check for grant opportunities

http://www.ala.org/pla/awards
https://www.imls.gov/grants/apply-grant/available-grants
https://www.scholastic.com/librarians/programs/grants.htm

ATTRACT BOTH DIGITAL NATIVES AND IMMIGRANTS

- Classes of all types: introductory, ‘petting zoos’, one-on-one training, show the good, the bad and the ugly.
- Providing the tech may be enough…but also a place for “tech complaints”.
- Horizontal ‘sharing’ vs. Vertical ‘hierarchies’. Highlight the pros and cons of both philosophies.
- Technology matching – allow natives and immigrants to interact and learn from each other in a non-judgmental atmosphere.



TOOLS AND TIPS FOR TEACHING TECHNOLOGY

Make it interactive and connect with their needs – set up a collaborative environment or use their tech to install safe and useful tools.

- How to use Facetime/Skype
- How to share photos (via Dropbox or other cloud apps)
- How to play a new gaming system (or provide a space to play one)
- How to use social media (this could be a whole series of programs)
- Job search and homework time – computers reserved for these purposes

TOOLS AND TIPS FOR TEACHING TECHNOLOGY

- Use examples – both good and bad – for what technology does.
  - Use some great apps that make life easier (list-making, productivity, mapping)
  - Highlight bad actors and what to watch for
- Integrate technology (cautiously) into other library events.
  - Use GoodReads during Book Club?
  - Sign up for events with Google Forms?
- Provide a private room where patrons can ask questions or provide anonymous suggestions to answer questions.

BRIDGING THE TECHNOLOGY DIVIDE: IT'S A SONG THAT DOESN'T END

- Time and technology wait for nobody.
- The divides are clear and sadly unsurprising – but libraries are in a unique but difficult position to help make the divide less severe.
- It begins with confidence – all people of all ages have had to adapt to new technologies in their lifetimes.
- Take suggestions from patrons – they know what they want. Find staff or volunteers to become 'tech experts'.
- With smart outreach and strategic planning, your library can be a tech hub that attracts the curious and those in-need.

Resources:

- The Library's Role in Bridging the Digital Divide
- Generational Differences
- The Widening Digital Divide
- The Digital Gap: Bringing everyone closer
- Towards a Framework for Digital Justice
- A Small Iowa Library and Tech Engagement

QUESTIONS?

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