The Digital Divide

Yanique Sears and Adam Prado

Types of Digital Divide

- Access Divide refers to the ability of people to access this resource.

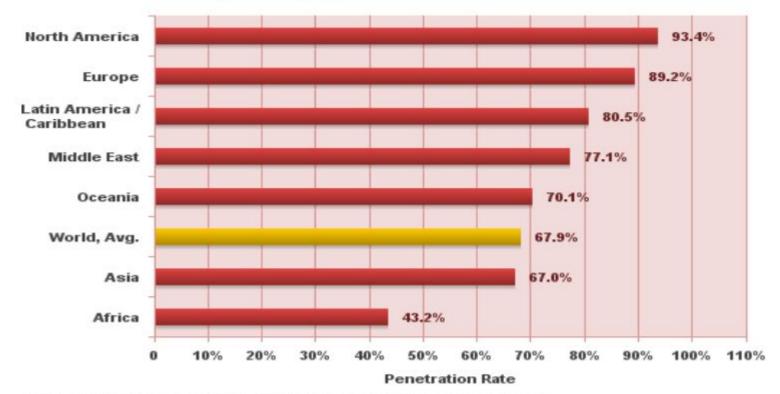
- **Use Divide** refers to the digital skills people have

- Quality of Use Divide refers to people knowing how to use their digital skills.

Most significant causes of the differences in access to the internet

- 1) Wealth/development levels of countries
- 2) Income/wealth of individuals
- 3) Educations levels
- 4) Age
- 5) Race/Ethnicity
- 6) Rural/Urban

Internet World Penetration Rates by Geographic Regions - 2022

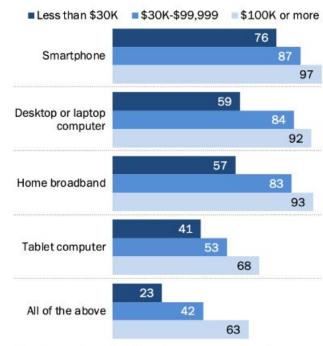


Source: Internet World Stats - www.internetworldstats.com/stats.htm

https://internetworldstats.com/stats.htm

Americans with lower incomes have lower levels of technology adoption

% of U.S. adults who say they have each of the following, by household income



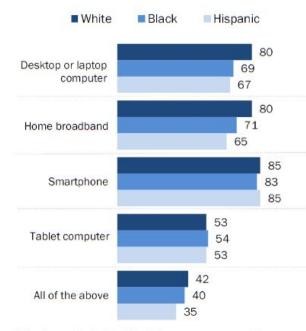
Note: Respondents who did not give an answer are not shown. Source: Survey of U.S. adults conducted Jan. 25-Feb. 8, 2021.

PEW RESEARCH CENTER

https://www.pewresearch.org/fact-tank/2021/06/22/digital-divide-persists-even-as-americans-with-lower-incomes-make-gains-in-tech-adoption/

Black and Hispanic adults in U.S. are less likely than White adults to have a traditional computer, home broadband

% of U.S. adults who say they have the following

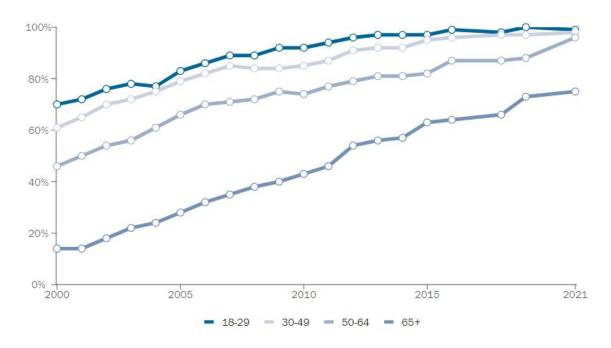


Note: Respondents who did not give an answer are not shown. White and Black adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Source: Survey of U.S. adults conducted Jan. 25-Feb. 8, 2021.

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Internet use by age

% of U.S. adults who say they use the internet, by age



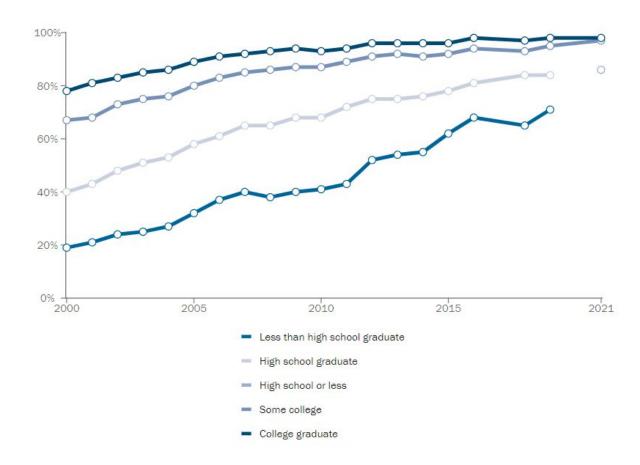
Note: Respondents who did not give an answer are not shown. Source: Surveys of U.S. adults conducted 2000-2021. Data for each year based on a pooled analysis of all surveys conducted during that year.

PEW RESEARCH CENTER

https://www.pewresearch.org/internet/fact-sheet/internet-broadband/?menuItem=6b886b10-55ec-44bc-b5a4-740f5366a404

Internet use by education

% of U.S. adults who use the internet, by education level



Digital Equity

"Digital equity thus includes issues related to access, sometimes called the first-level digital divide, as well as the second-level digital divide, which is related to the use of digital tech."

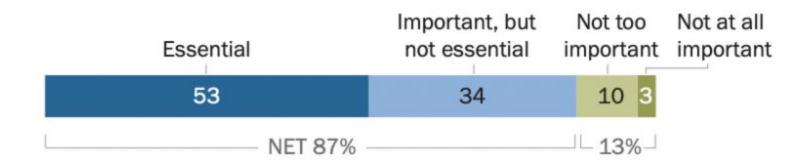
- current attempts to address the digital divide usually address access but focus less on making sure people with the access can use the tools.

https://www.thecgo.org/benchmark/the-digital-divide-digital-equity-and-the-nature-of-the-problem/

| | 2011 | 2012 | 2013 | 2015 | 2017 | 2019 |
|----------------------|------|------|------|------|------|------|
| Can use elsewhere | 3% | 3% | 3% | 2% | 3% | 3% |
| No need or interest | 51% | 52% | 51% | 60% | 64% | 67% |
| No computer | 14% | 12% | 14% | 8% | 5% | 3% |
| nternet unavailable | 1% | 1% | 1% | 3% | 3% | 4% |
| Privacy and security | 1% | 1% | 1% | 2% | 2% | 2% |
| Too expensive | 30% | 31% | 30% | 26% | 24% | 21% |

Roughly half of adults say the internet has been essential to them during the coronavirus outbreak ...

% of U.S. adults who say the internet has been ___ to them personally during the coronavirus outbreak



https://www.thecgo.org/benchmark/the-digital-divide-digital-equity-and-the-nature-of-the-problem/

Covid and the digital divide

https://www.weforum.org/agenda/2021/01/covid-digital-divide-learning-education/

According to an International Telecommunication Union report, in the developed world the internet penetration rate is 87% but just 47% in developing countries and 19% in the least developed countries.

Positive Signs

- The digital divide, at least as far as access to the internet, is starting to narrow for most demographic breakdowns.
- Countries that have the least access to the internet are also the ones where internet usage is growing the fastest each year.
- Access to the internet through smartphones in the US has a much narrower digital divide than broadband internet.

Solutions

- •Universal Access/Community Access Centers: Creating spaces where people can go to access the internet and learn technology-based skills is one of the major solutions being implemented.
- Digital Literacy Programs: Investing in digital literacy, beginning at a young age and continuing through adulthood, can make people better consumers of digital ecosystems.
- Affordability Programs: Expanding programs that make broadband and telephone access more affordable for households. Typically, these programs are geared toward schools and libraries. Opening them up to households with school age children, especially those that are in "desert" areas

Digital Divide App

```
Code Design Data
                                   Show Toolbox 🏂
                                                                                           Workspace
                                       var area = ["rural", "suburban", "urban"] ← → ;
   worldScreen
                                        var areaPercent = [72,79,77] → →;
                                        var relativeAreaPer findRelativePer (areaPercent)
                                    18
                                        var (relativePickPer) = [] → ;
                                        onEvent(▼"worldButton", ▼"click", function())
WORLD
                                           setScreen(▼"worldScreen");
                                    21
                                                                         function()
                                        onEvent(▼"usButton", ▼"click",
                                    24
                                           setScreen (▼ "usCheckBoxScreen");
                                           for (var i = 0; i < 3; i++)
               SOUTHERN SCHAN
                                             radioButton([income [i]], ▼false, "incomeRB"); -
                                    26
                                                                       (i+1) | *80 , 140, 15, 15); ←
                                             setPosition(income[i]
                                    27
                                    28
                                             textLabel( "incLabel" + i ,
                                                                       income[i]);
                                             setPosition("incLabel"+i),
                                                                           (i+1) | *80 -20 , 120, 0, 0); ←
                                    29
                                    30
           Run
```