

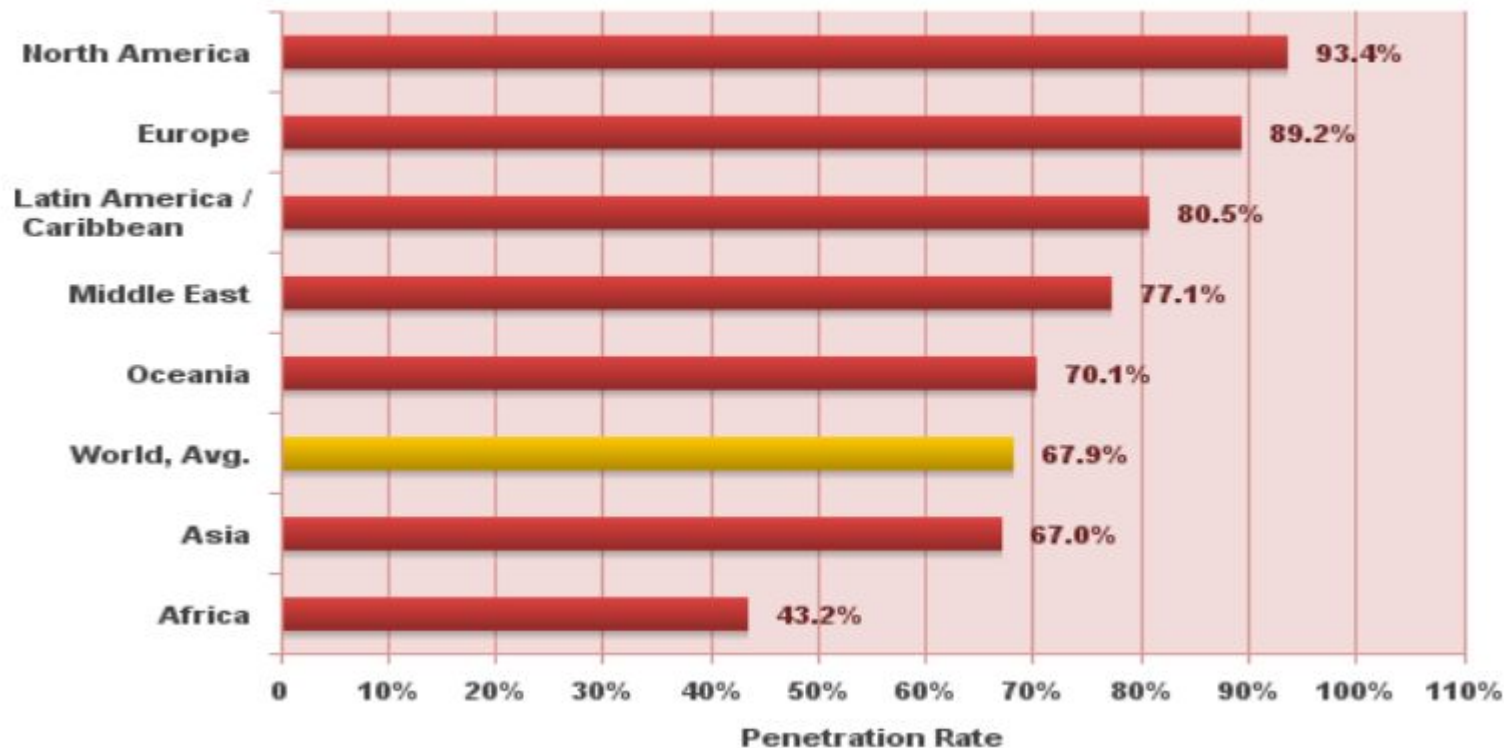
# The Digital Divide

Yanique Sears and Adam Prado

# **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) Race, Age, Rural/Urban

## Internet World Penetration Rates by Geographic Regions - 2022

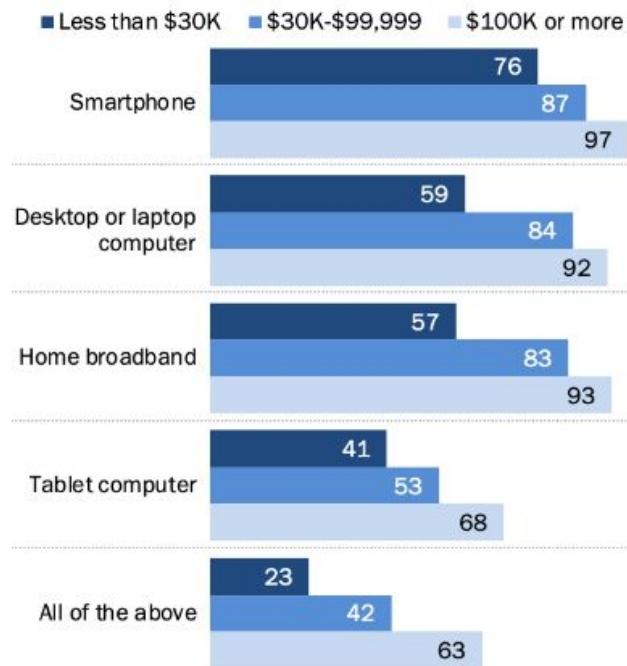


Source: Internet World Stats - [www.internetworldstats.com/stats.htm](http://www.internetworldstats.com/stats.htm)

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## 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

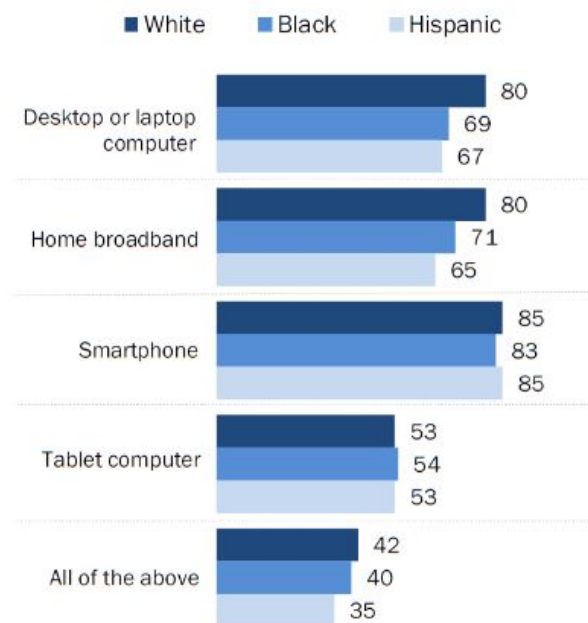


Note: Respondents who did not give an answer are not shown.  
Source: Survey of U.S. adults conducted Jan. 25-Feb. 8, 2021.

PEW RESEARCH CENTER

## 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



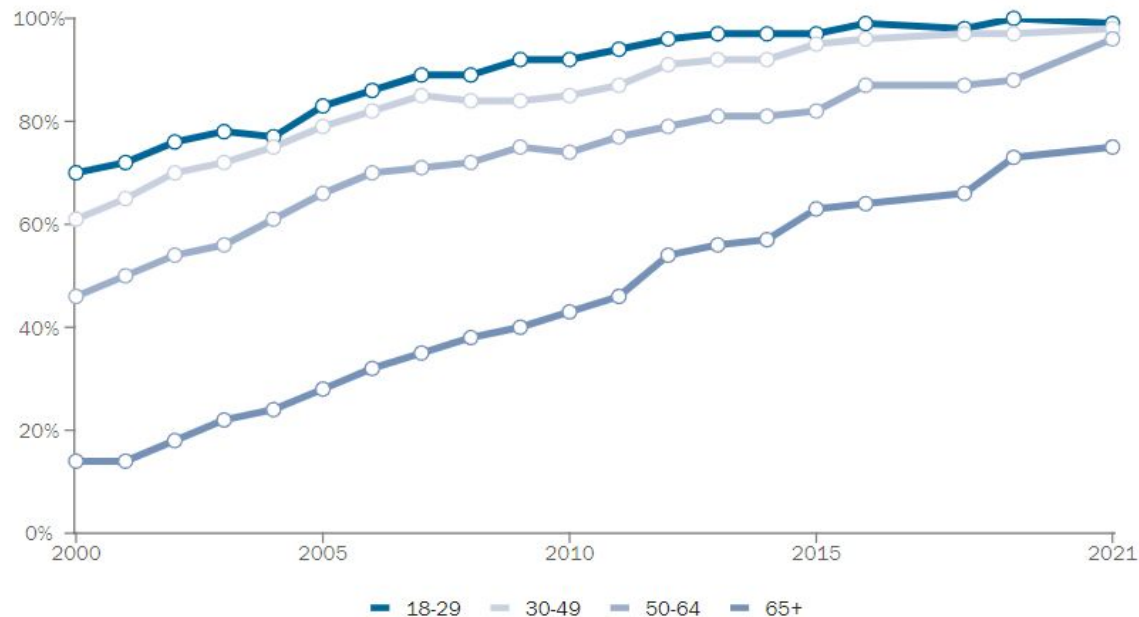
Note: Respondents who did not give an answer are not shown.  
White and Black adults include those who report being only one race and are not Hispanic. Hispanics are of any race.  
Source: Survey of U.S. adults conducted Jan. 25-Feb. 8, 2021.

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

## 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.

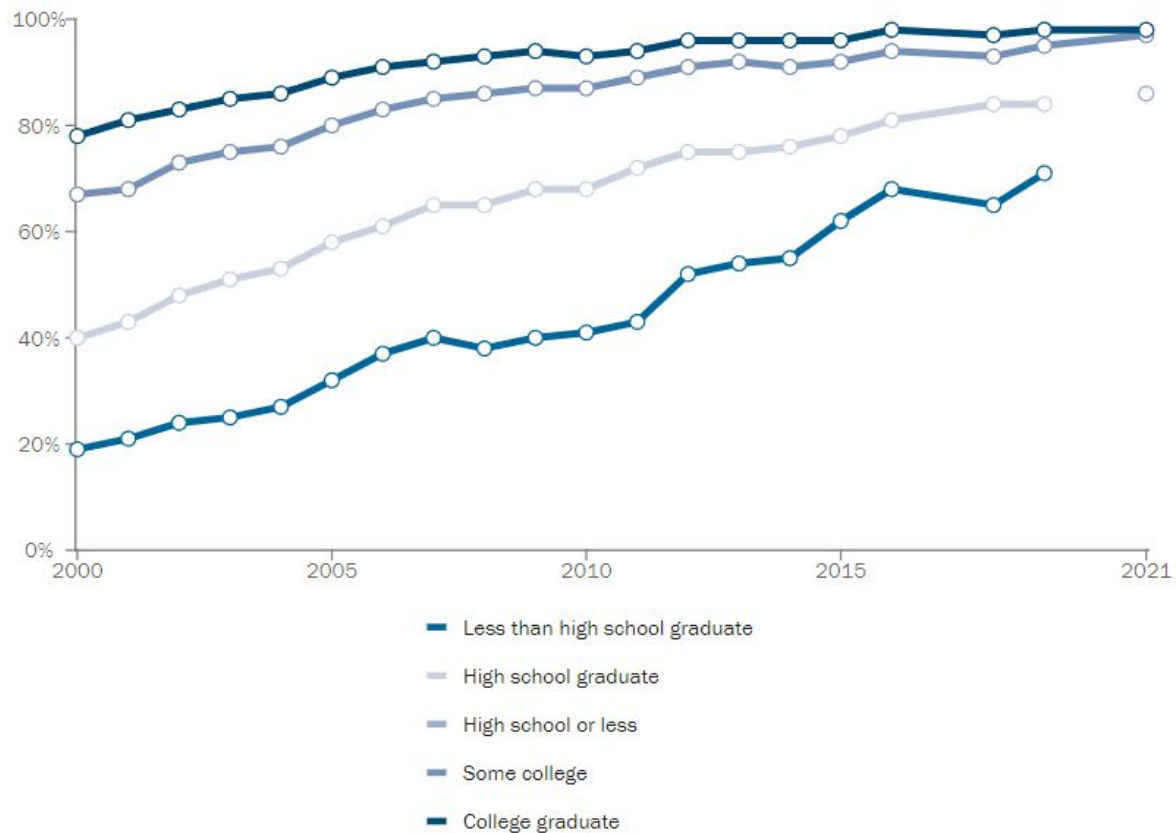
Source: Surveys of U.S. adults conducted 2000-2021. Data for each year based on a pooled analysis of all surveys conducted during that year.

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<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*



Why households aren't connected to the Internet, in relative proportions						
	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%
Internet unavailable	1%	1%	1%	3%	3%	4%
Privacy and security	1%	1%	1%	2%	2%	2%
Too expensive	30%	31%	30%	26%	24%	21%

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

# 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.”

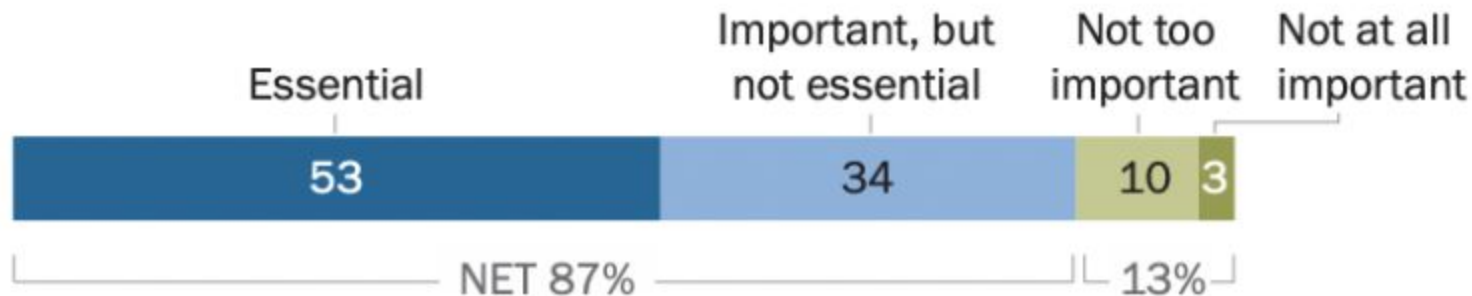
- current attempts to address the digital divide usually address access but focus less on making sure people with the access can use the tools.

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



## 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/>

# 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.

# 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.

# Digital Divide App

Code Design Data

worldScreen



WORLD

Run

Show Toolbox Workspace

```
15 var area = ["rural", "suburban", "urban"];
16 var areaPercent = [72, 79, 77];
17 var relativeAreaPer = findRelativePer(areaPercent);
18
19 var relativePickPer = [];
20 onEvent(▼"worldButton", ▼"click", function() {
21   setScreen(▼"worldScreen");
22 });
23 onEvent(▼"usButton", ▼"click", function() {
24   setScreen(▼"usCheckBoxScreen");
25   for (var i = 0; i < 3; i++) {
26     radioButton(income[i], ▼false, "incomeRB");
27     setPosition(income[i], (i+1)*80, 140, 15, 15);
28     textLabel("incLabel"+i, income[i]);
29     setPosition("incLabel"+i, (i+1)*80-20, 120, 0, 0);
30   }
```

