



The Digital Divide

Sam Kartenson



Hi we'll be presenting on the digital divide and surrounding issues

What is the digital divide?

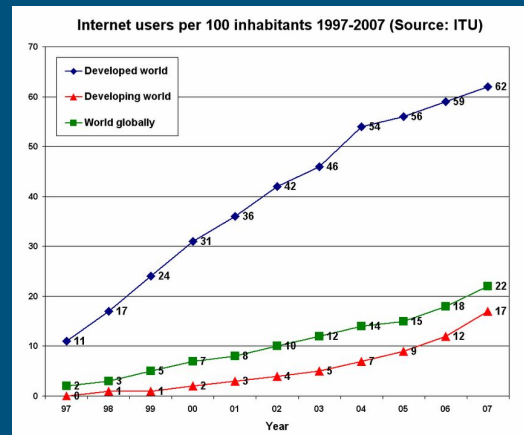
https://www.youtube.com/watch?v=RjpFX7B_OyA 1.25x speed

So what is the digital divide? We have a short video to start us off, which we'll be playing at slightly higher speed to fit

What is the digital divide?

The divide between those who have access to and/or knowledge of information and communication technology vs those who do not.

21 million americans didn't have access to broadband internet in 2017.



https://www.researchgate.net/figure/The-digital-divide-on-a-global-scale-in-terms-of-Internet-users-source-ITU-5_fig2_289843201

For anyone who didn't catch it is the divide between those who have access to and knowledge of information and communication technology vs those who do not.

This is a problem both in developing countries and countries like america, with the fcc estimating 21 million americans not having access to broadband internet in 2017, which is said to be an underestimate. It also doesn't count those without high enough speed for applications like zoom, which as we all know is very important right now.

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The digital divide could also be thought of a multiple divides

<https://www.businessinsider.com/americans-lack-of-internet-access-likely-underestimated-by-government-2020-3>

What is the digital divide?

The divide between those who have access to and/or knowledge of information and communication technology vs those who do not.

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... divides?

- Economic divide: Can people afford internet? Devices? Is there even internet there?
- Educational divide: Do people have the skills to use this technology? Do they have a way to learn?
- Social divide: Did people grow up in spaces with access? Did they grow up seeing people like them using this technology? (gender, race, culture)

Maybe more as some technologies progress

- VR?
- Brain interfaces?

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The digital divide could also be thought of as multiple divides

There's the obvious economic aspect of if people can afford internet access or if it's even there. There's the educational divide where many people don't know how to use this technology. And there's the social divide involving gender, race, and culture. Of course these divides are closely related and affect each other, but they also can exist independently.

As technology progresses and some technologies become more widespread, other technologies could cause similar divides. Two technologies that could potentially cause another digital divide are VR and brain interface technology, both after they improve or expand a bit of course.

<http://www.digitaldividecouncil.com/what-is-the-digital-divide/>

How does the digital divide affect people?

Digital divide in countries with better internet

- Education issues (esp with covid)
- Career/job hunting issues
- Impact on social life

Digital divide in countries that lack internet infrastructure

- Less connected and informed
- Easier for government to lie about situations
- Slower economic growth

How does the digital divide affect people?

In countries like the US where internet is normal and expected, lacking internet can make many things much harder. For education, it's much harder to research or learn things outside of class, and for cases like this year internet is pretty much necessary for any learning. Even after graduating it's more difficult to stay up to date with current events. It also impacts one's career, it's harder to find jobs, and many jobs require internet skills or expect that you have an internet connection at home. Social life is also affected. In areas where internet access is common social circles expect people to have internet access, and areas where internet is less common are more isolated and where internet access would help the most socialization-wise.

For countries more fully on the other side of the digital divide instead of being split by it, the most notable effects can be different. As expected people aren't as connected over long distances. It's also more difficult to be informed on subjects outside of what your news media has time and space for. It's more difficult for people to verify the validity of media around them and therefore easier for governments to get away with misinformation. Modern trade and industry heavily utilizes the internet and any area lacking it puts it at a huge disadvantage economically.

Issues involving the closing of the digital divide

Setting the standard for internet in an area

- Canadian ISPs almost all having caps
- Facebook's FreeBasics, two-tiered internet
- Facebook being seen as the center of the internet, or even as above/separate from the internet

Closing the digital divide is has its own problems on top of the feat of carrying it out. There's plenty of ways people can try to exploit new internet users and problems that come from expansion. For example

Canadian ISPs almost all have data caps making having a cap on your internet unless you pay much more mandatory in many cities. People can't just switch to one without caps so some are pursuing government action to ban ISP data caps.

Facebook's internet.org attempted to move into various Asian and African countries with a two-tiered internet model. This was similar to the loss of net neutrality scenarios that are talked about, but instead of having specific sites being paid everything outside of around 50 sites and apps would be blocked. This would have been the first internet access many of these people would have, so it would set the standard people are used to.

In some of these countries Facebook expanded internet to, Facebook became synonyms with the internet. Many users don't even acknowledge that facebook is part of the internet, just thinking of it as a separate thing.

<https://qz.com/333313/millions-of-facebook-users-have-no-idea-theyre-using-the-internet/>
<https://www.wired.com/story/what-happened-to-facebooks-grand-plan-to-wire-the-world/>

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Peoples and governments facing new problems

- Facebook's internet.org in Myanmar
- Legislative vacuums

We've talked about a lot of these problems already, facebook in Myanmar and everything that happened from that. The situation there is still unfolding right this moment if you want to look more into that.

Small governments have to deal with many of the problems we've had to face with the internet since the 90s in just a couple years as rollout of internet can be fast. Our government hasn't fully caught up with the legislative vacuum of the internet, a government that's around 20 years behind on internet law has a huge amount of work to do when gaining internet infrastructure.

<https://www.cbc.ca/news/technology/crtc-review-differential-pricing-zero-rating-1.3623026>

What other technologies could cause a divide?

Brain interface/augmentation divide

- Augmentation linked to both internet infrastructure and medical infrastructure
- Complexity and danger will make them very expensive for a long time

VR/metaverse divide

- Mobile VR slowly being depreciated
- Pay thousands between a headset and a computer to run it, or be tied to Facebook
- Virtual worlds focus on either vr or non-vr users with less importance on the other

We previously mentioned that other technology could cause another divide

A long ways down the line intrusive brain interfacing would be only accessible for those who can both afford the acquired surgery and have someone they can get to that can do the procedure. Maintenance would also be a potential issue, so places without as good medical infrastructure wouldn't be able to support this technology being common as well.

On top of that, of course this would be extremely expensive, brain surgery always is and this would be something not covered by insurance. Anyone selling these as a product would put the price even higher to cover the potential costs from a few of them failing and hurting or killing people.

On the closer to present end, there's already some concerning occurrences involving what could eventually be the vr divide

Mobile VR gave many people bad impressions of VR and companies are moving away from supporting products because of that. Some newer phones have what's needed for good mobile VR but most users out there don't have those phones. Mobile VR has been praised as a solution to some of the digital divide as it's a lot easier to get mobile data around the field than broadband, and VR allows a lot more online than what you could normally do on a phone.

The current VR market doesn't have much on the lower end, and because

Facebook's Oculus is the best available for the price for many it's the only option for quality VR. Recently Oculus started requiring Facebook accounts to use, and in turn Facebook requires you to use your official name. Failure to do so could end up getting your hundred dollar headset bricked. Relating back to Matt's presentation on VR, for many marginalized communities having to link one's vr presence to their official name is very much not a good thing, especially in countries that make certain identities illegal.

Lastly, virtual worlds tend to be build either for vr or for non-vr users with the other added on after. While many can do both, it's easy to see they're built for one and the other is secondary.

Conclusion

To conclude, the digital divide has different parts which need to be addressed to lessen it, and as technology evolves the digital divide will evolve as well