



# The dangers of digital exclusion



@littlehelli



@helen



Hi!

UX consultant

User researcher

Speaker

Event organiser

**S P A R C K \***









"The danger is that you think you are getting a representative view of the world and you are really, really not, and you don't know it."

- Eli Pariser, Author of *The Filter Bubble*



— CART

HORSE —






“Every decision we make can raise or lower barriers to participation in society.

It’s our collective responsibility to lower these barriers through inclusive products, services, environments, and experiences.”

– *Microsoft Inclusive Design manual*



A person wearing a yellow sweater is sitting at a desk, typing on a laptop. The laptop is open, and the person's hands are visible on the keyboard. The background is slightly blurred, showing a window with a grid pattern. The text "One in 8.2% of UK adults has never used the internet." is overlaid in white on the image.

One in 8.2% of UK  
adults has never used  
the internet.





4.3 million  
people with zero  
Basic Digital Skills







**76%**

**Retired and over  
the age of 65**

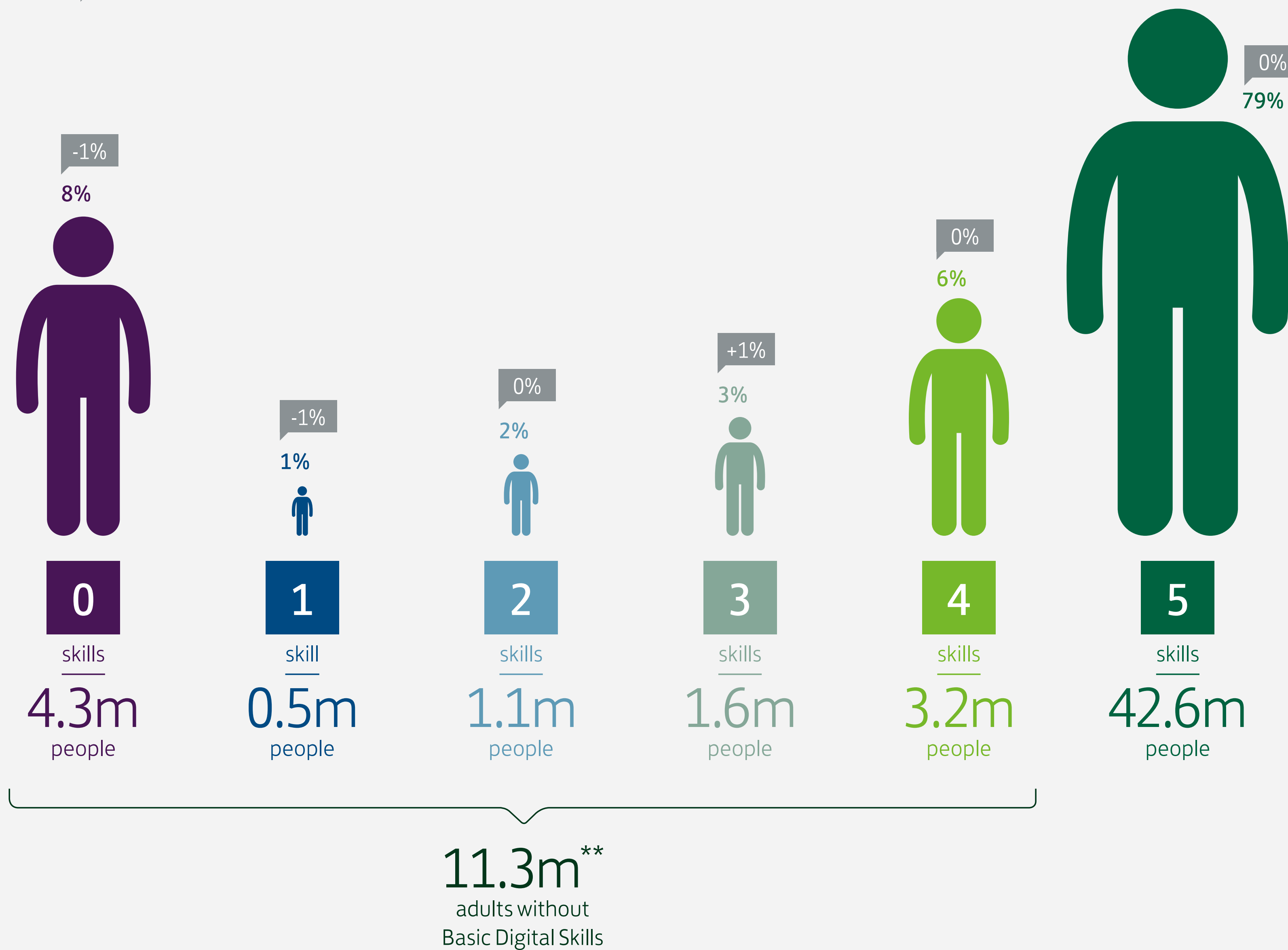
**20%**

**Aged 45-64**

**4%**

**Under the  
age of 45**







# Basic Digital Skills measure

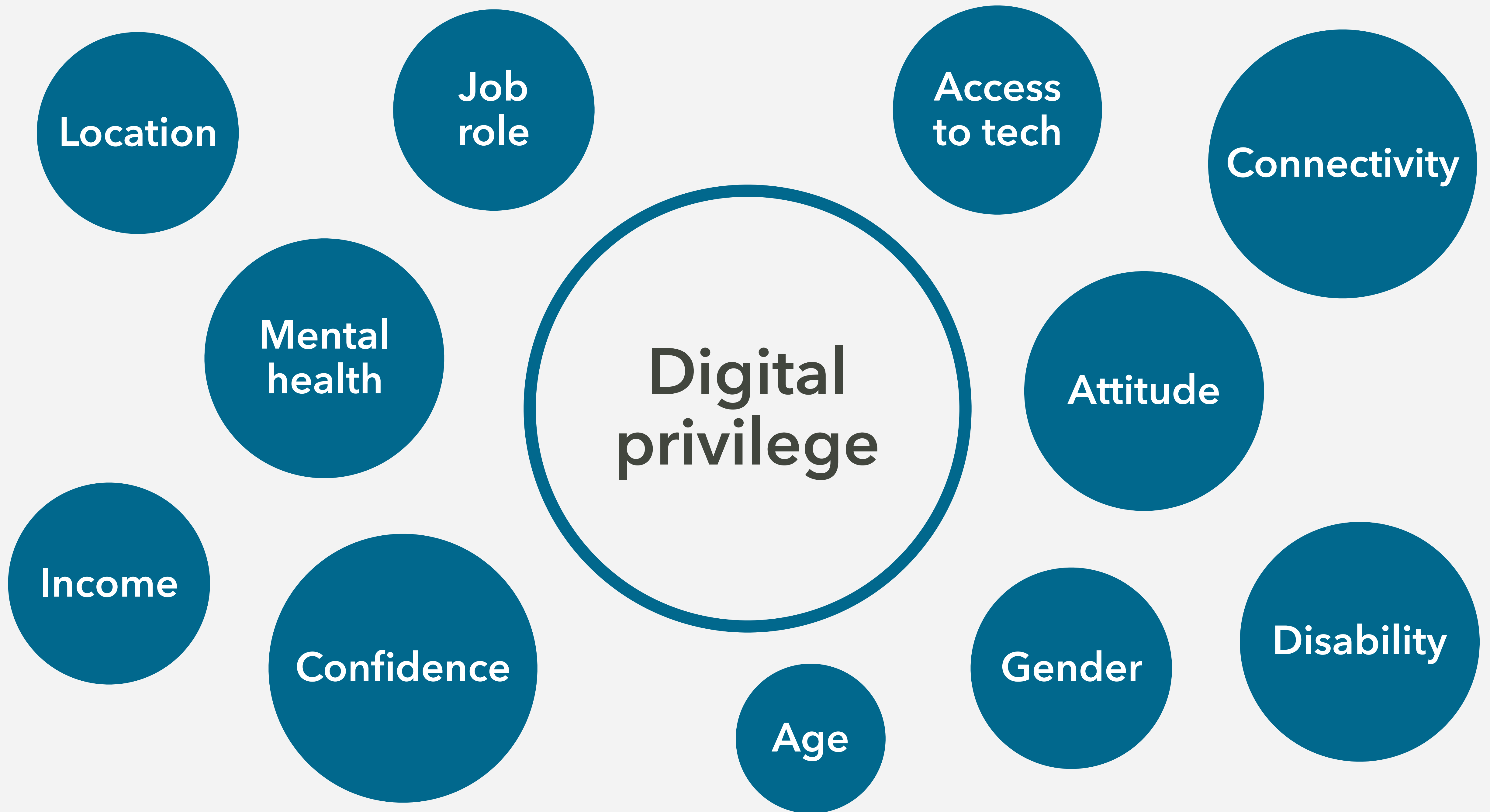
1. Managing information
2. Communicating
3. Transacting
4. Problem solving
5. Creating





Digital  
privilege







# Accessibility & inclusivity

- The ability to use the internet and online services
- The ability to connect to the internet and go online

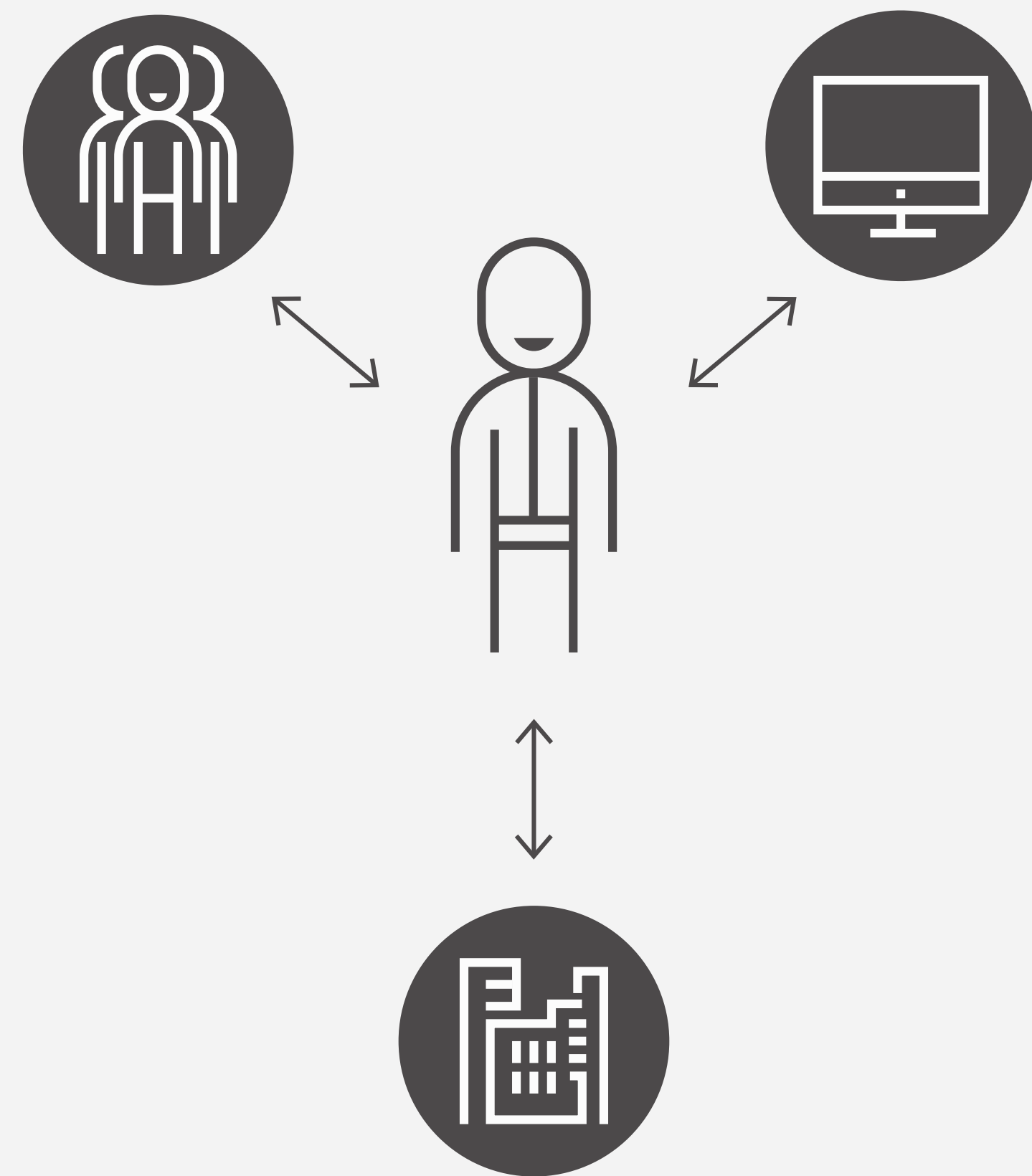




# 20% / 3.4m

of disabled adults had never used  
the internet in 2018





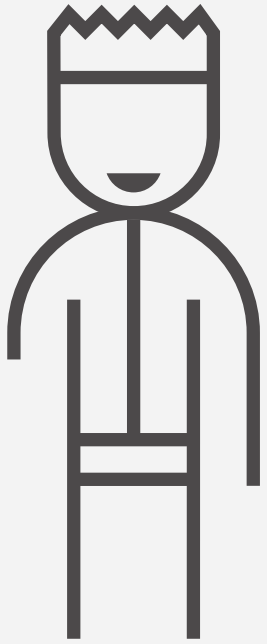

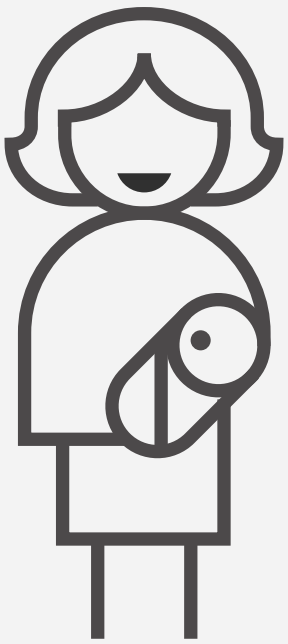
## Disability as context dependent


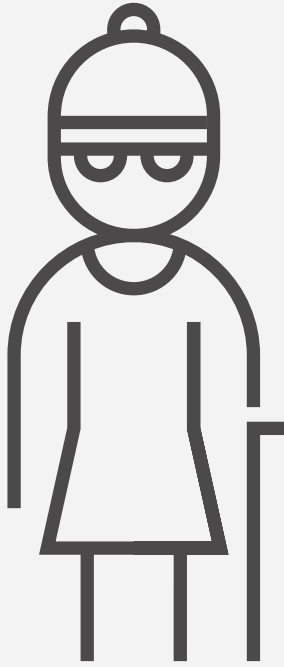

“Disability is not just a health problem. It is a complex phenomenon, reflecting the interaction between features of a person’s body and features of the society in which he or she lives.”

–World Health Organization

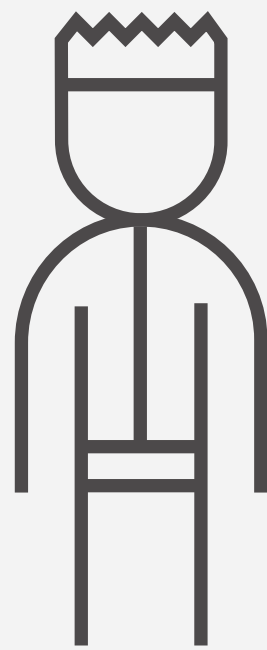




# The Persona Spectrum

	Permanent	Temporary	Situational
Touch			
	One arm	Arm injury	New parent

See			
	Blind	Cataract	Distracted driver

	Permanent	Temporary	Situational
Hear			
	Deaf	Ear infection	Bartender

Speak			
	Non-verbal	Laryngitis	Heavy accent



"A universal web is designed for all, inclusive of geography, language, and culture. It's a place that is available for people of all abilities, aptitudes, and attitudes.

In short, design has the power to not only remove barriers but also not to create them in the first place."

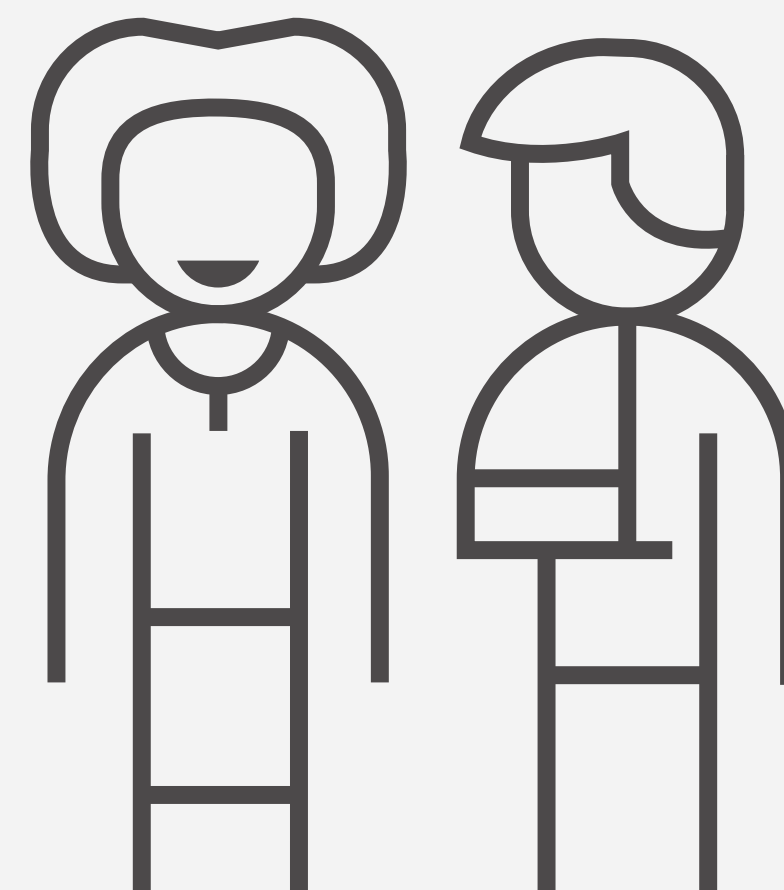
- *A Web for Everyone, Sarah Horton & Whitney Quesenbury*



# The Persona Network



Family



Friends



Strangers






**Any user may need assisted digital support, if they lack**

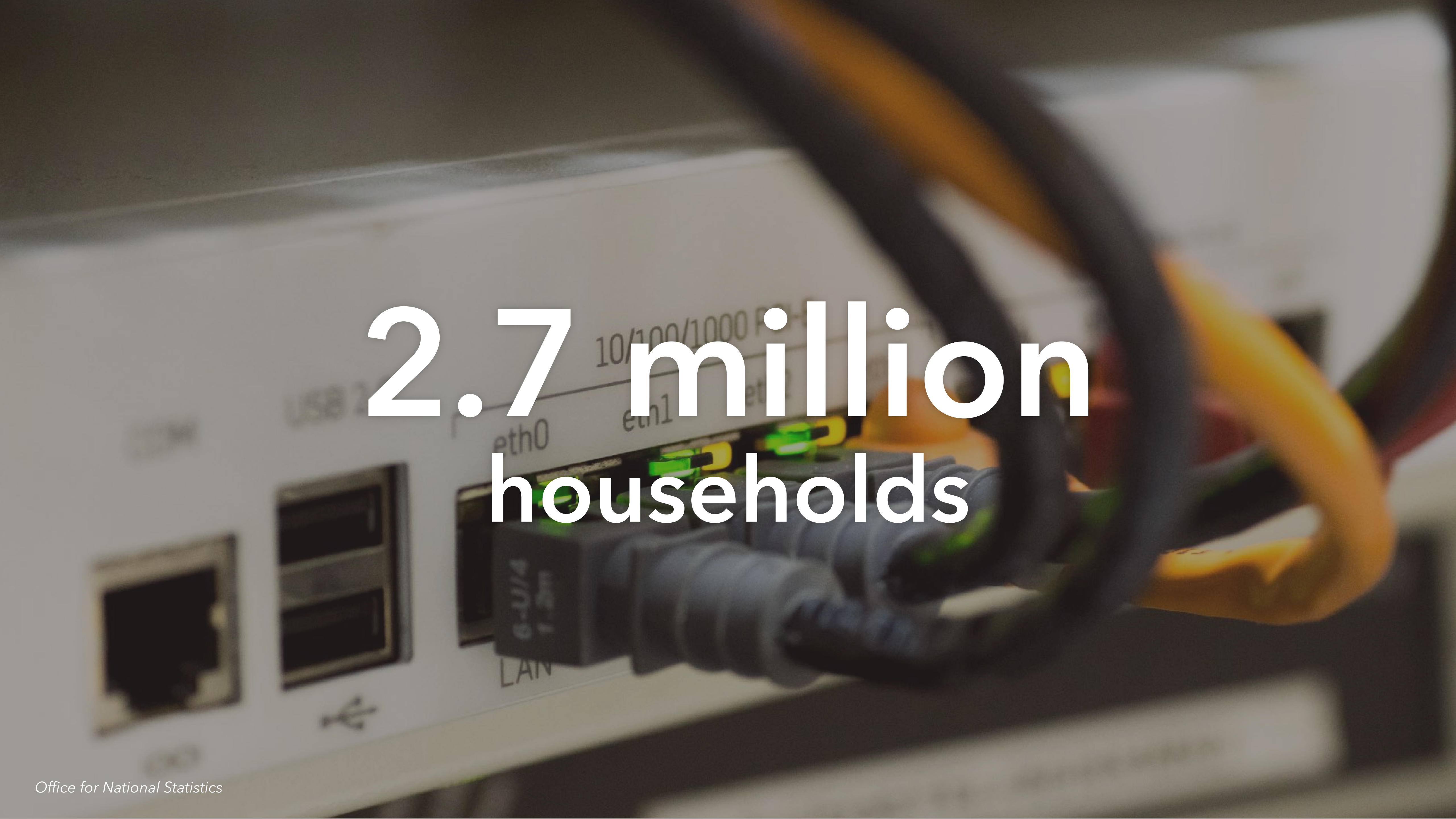
- trust in your service or the internet
- confidence to use an online service themselves
- access to the internet
- digital skills
- motivation to overcome these barriers on their own





One in 10 UK  
households doesn't  
have internet access.



The background image is a close-up, slightly blurred photograph of a network switch or patch panel. Several network cables are plugged into the ports. Some of the ports have small green LEDs that are illuminated, indicating active connections. The cables are various colors, including yellow, blue, and black. The overall tone of the image is muted and professional.

2.7 million  
households





**How can  
we be more  
inclusive?**










 @littlehelli





“We frequently only create idealised personas: attractive people happily interacting with our products and completing tasks.”

– *Design for Real life, Eric Meyer & Sara Wachter-Boettcher*











# User



**User**



# Customer



**Visitor**




# Shopper









“Only two industries refer to their customers as ‘users’: computer design and drug dealing.”

– *Edward Tufte, Statistician and professor at Yale University.*



“How do we ensure we use technology ethically, in support of what’s “good,” and minimise harmful outcomes?”

– Peter Barr, Managing Partner, Deloitte





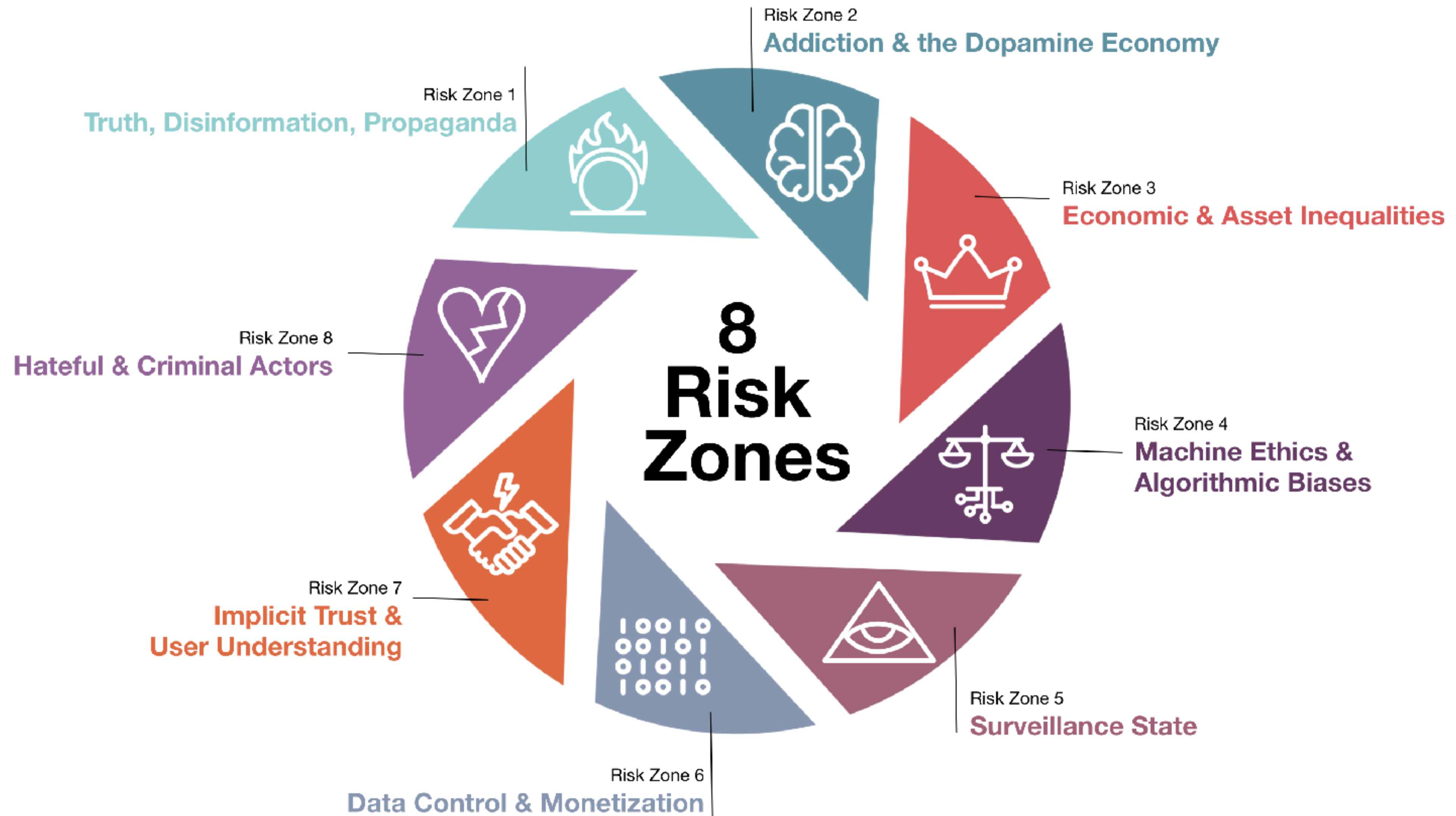


# How not to regret the things you will build.

- *Ethical OS Toolkit*

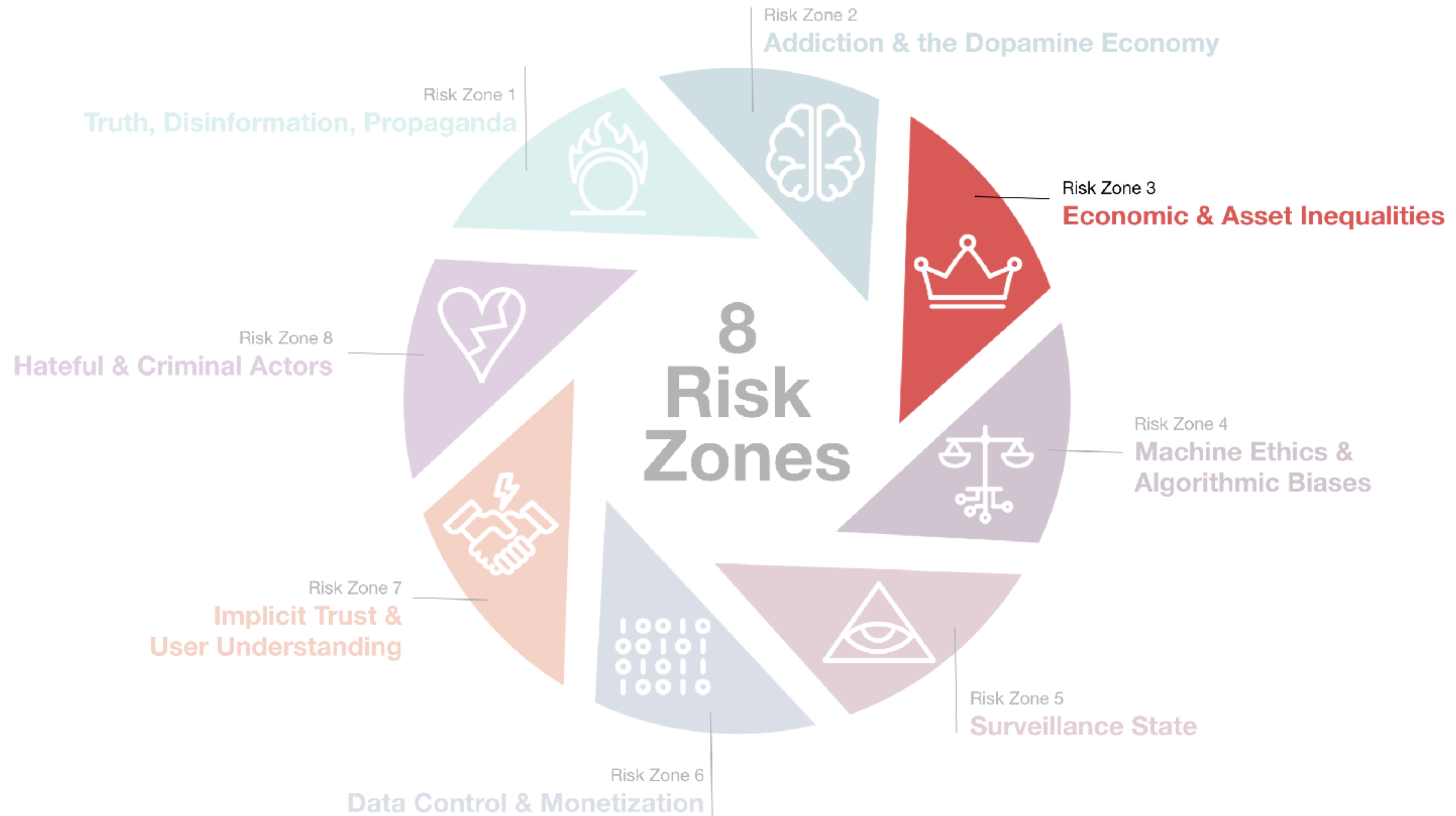


# Ethical OS Toolkit





# Ethical OS Toolkit







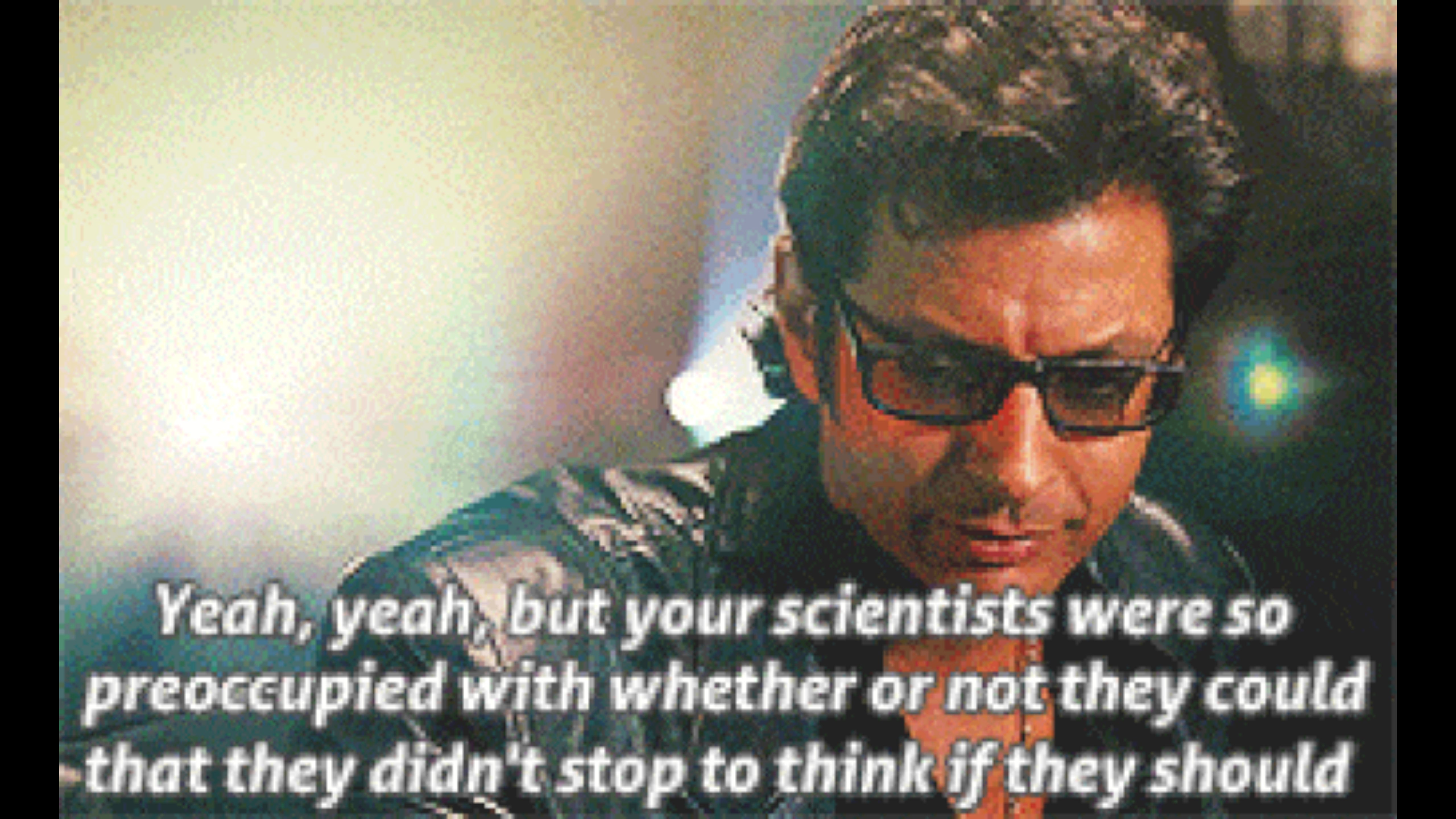


“We have to think about the long-term futures that our technologies are helping to create.

If we fail to do this, we fail everyone who uses these technologies. And in the worst-case scenarios, we fail democracy and equality at scales never possible before.”

– Sam Woolley, Director, Digital Intelligence Lab, Institute for the Future





*Yeah, yeah, but your scientists were so preoccupied with whether or not they could that they didn't stop to think if they should*



WHAT  
DO YOU  
MEAN  
?

Thank you :)  
Questions?

 @littlehelli

 @helen



## TOOLKITS

- **Microsoft Inclusive Design manual:** [https://download.microsoft.com/.../INCLUSIVE\\_TOOLKIT\\_MANUAL\\_FINAL.pdf](https://download.microsoft.com/.../INCLUSIVE_TOOLKIT_MANUAL_FINAL.pdf)
- **Ethical OS:** <https://ethicalos.org/>

## BOOKS

- **A Web for Everyone, Sarah Horton & Whitney Quesenbury**
- **Design for Real life, Eric Meyer & Sara Wachter-Boettcher**

## VIDEO

- **Beware online “filter bubbles”, TED Talk by Eli Pariser:**  
[https://www.ted.com/talks/eli\\_pariser\\_beware\\_online\\_filter\\_bubbles?language=en](https://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles?language=en)

## REPORTS

- **Office for National Statistics: Internet users, UK: 2018:**  
<https://www.ons.gov.uk/businessindustryandtrade/itandinternetindustry/bulletins/internetusers/2018>
- **Lloyds UK Consumer Digital Index 2018:**  
<https://www.lloydsbank.com/banking-with-us/whats-happening/consumer-digital-index.asp>