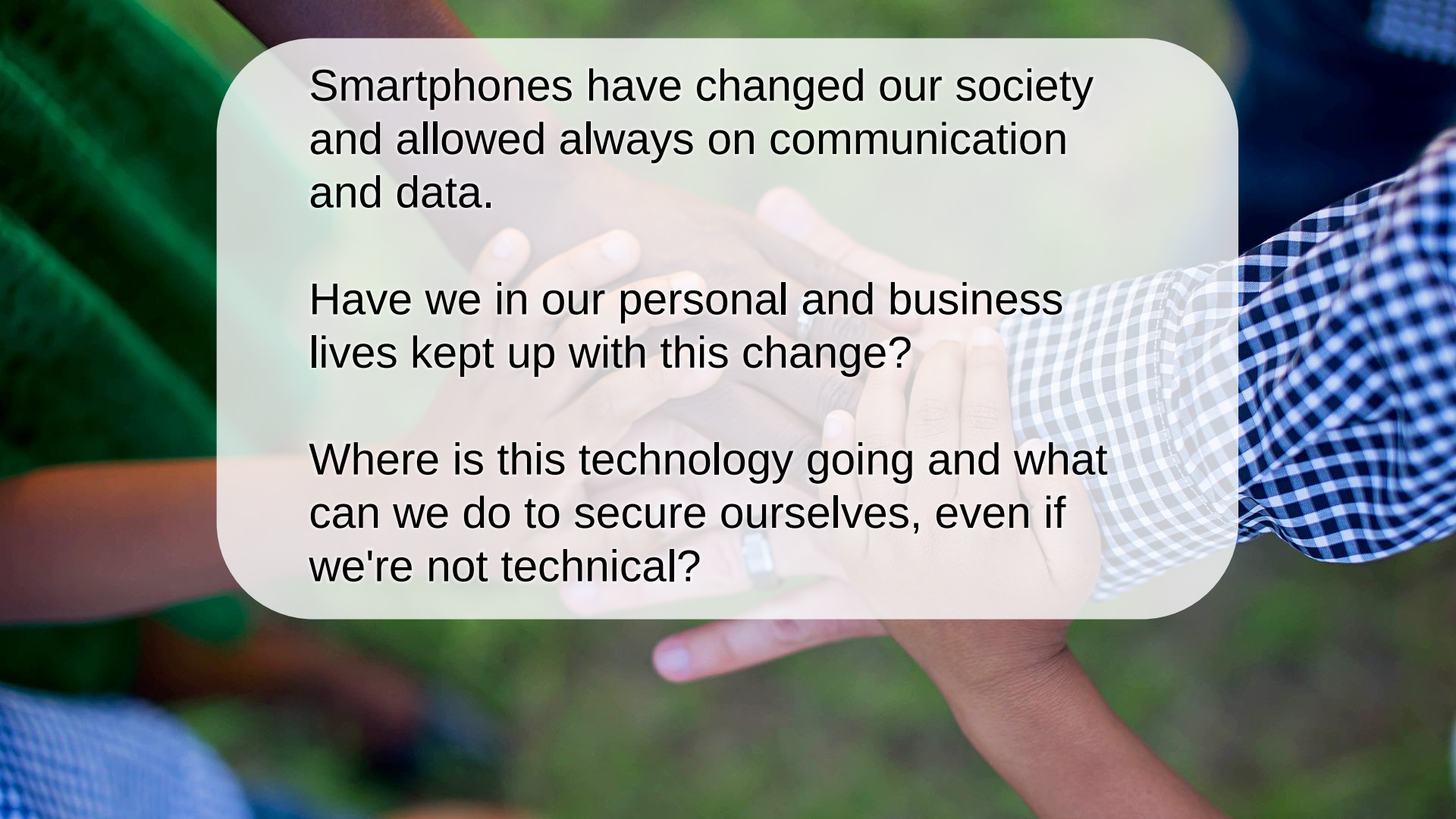
Smartphone Security What & Why

MJ Cook

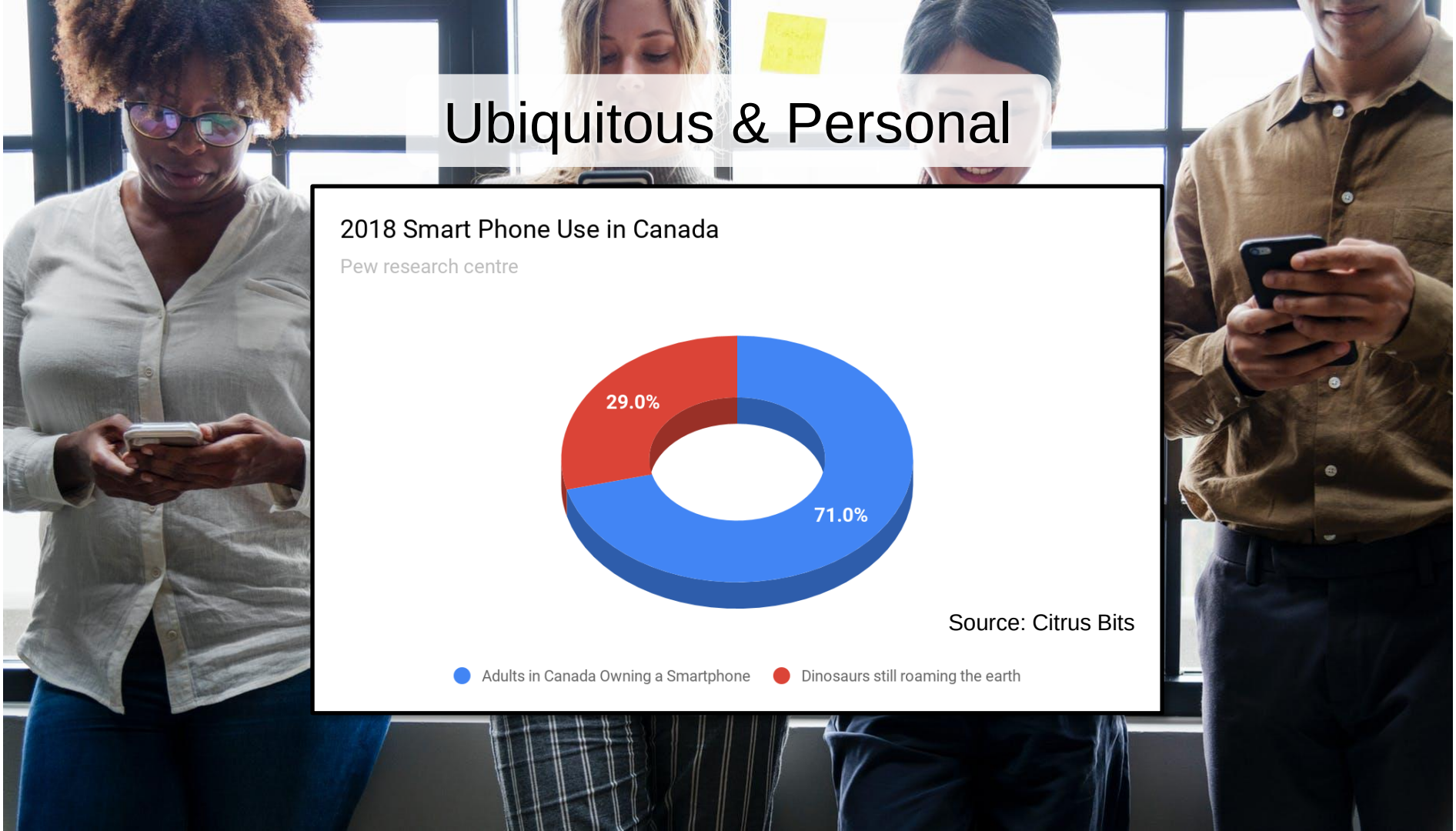


Smartphones have changed our society and allowed always on communication and data.

Have we in our personal and business lives kept up with this change?

Where is this technology going and what can we do to secure ourselves, even if we're not technical?

Ubiquitous & Personal



Ubiquitous & Personal

2018 Smart Phone Use in Canada

Pew research centre

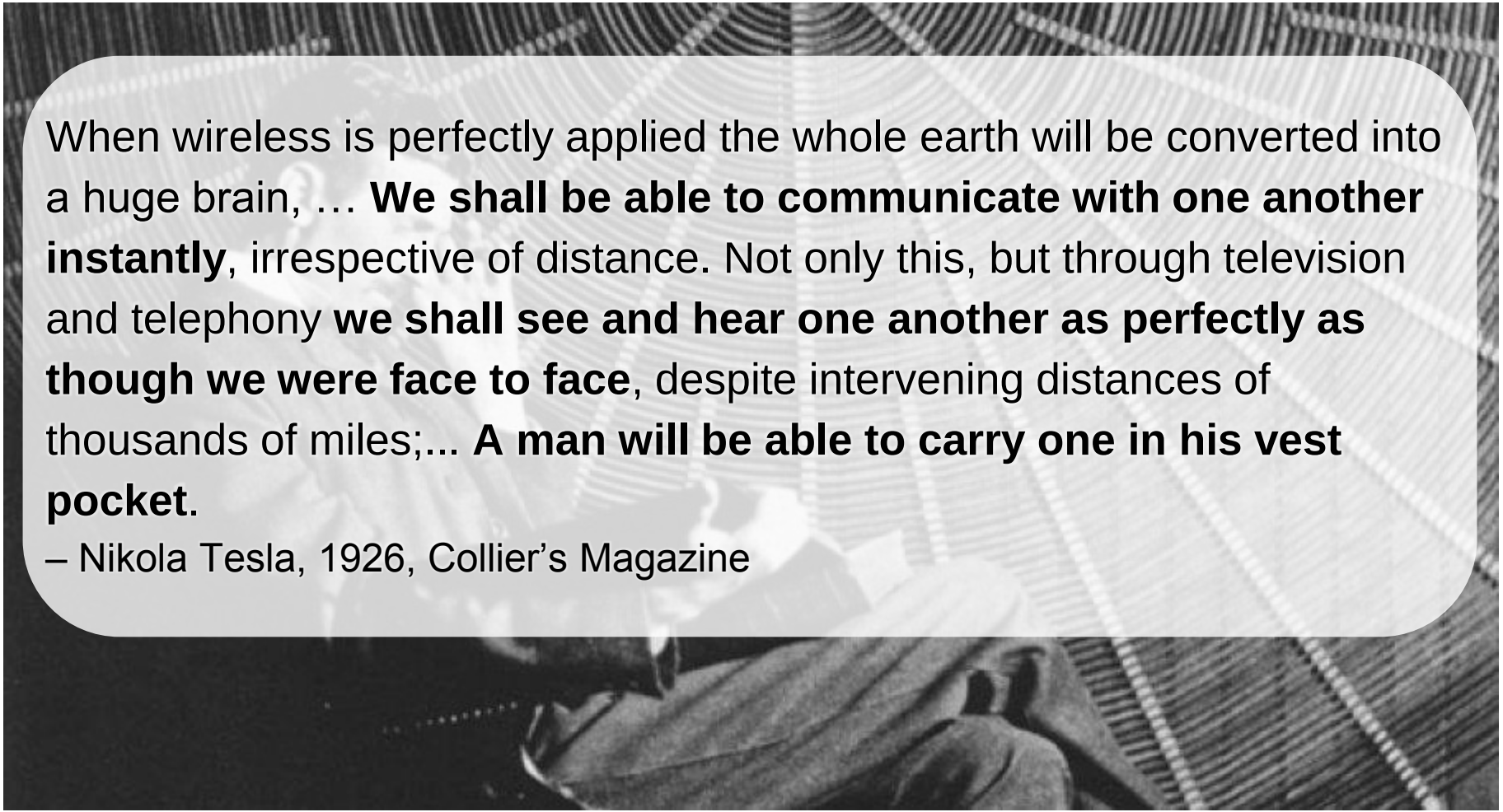
29.0%

71.0%

Adults in Canada

osaurs still roaming the earth

Source: Citrus Bits



When wireless is perfectly applied the whole earth will be converted into a huge brain, … **We shall be able to communicate with one another instantly**, irrespective of distance. Not only this, but through television and telephony **we shall see and hear one another as perfectly as though we were face to face**, despite intervening distances of thousands of miles;... **A man will be able to carry one in his vest pocket**.

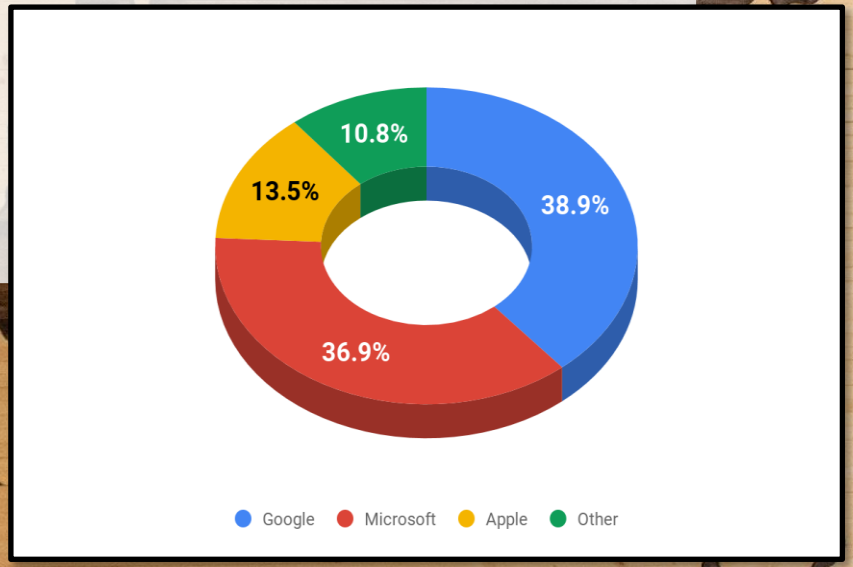
– Nikola Tesla, 1926, Collier’s Magazine

Google Android has **38.9%** of the worldwide operating system market share

Microsoft Windows has **36.9%**

Apple has **13.45%**

Source: Marketingland, 2017



JAN 2018

SHARE OF WEB TRAFFIC BY DEVICE

BASED ON EACH DEVICE'S SHARE OF ALL WEB PAGES SERVED TO WEB BROWSERS

LAPTOPS & DESKTOPS

43%

YEAR-ON-YEAR CHANGE:

-3%

MOBILE PHONES

52%

YEAR-ON-YEAR CHANGE:

+4%

TABLET DEVICES

4%

YEAR-ON-YEAR CHANGE:

-13%

OTHER DEVICES

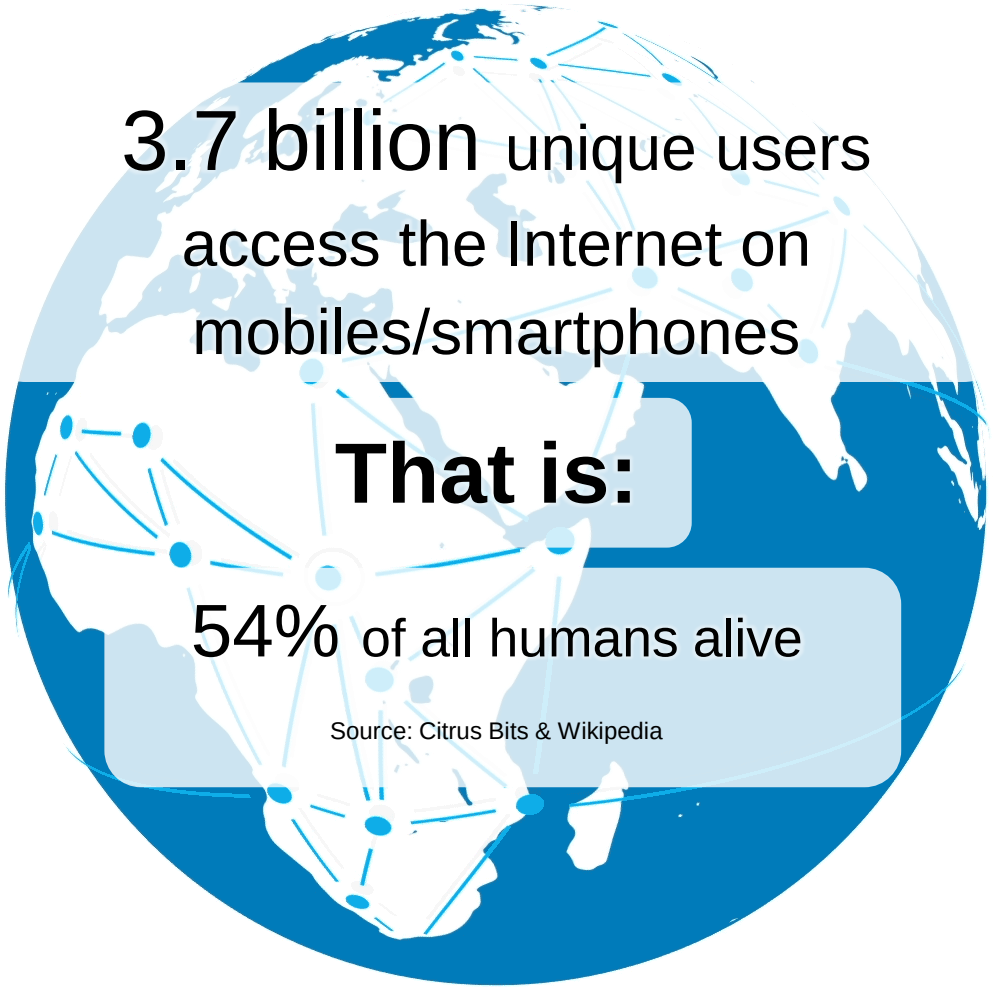
0.14%

YEAR-ON-YEAR CHANGE:

+17%

SOURCE: STATCOUNTER, JANUARY 2018 AND JANUARY 2017.

Hootsuite™ we are social



3.7 billion unique users access the Internet on mobiles/smartphones

That is:

54% of all humans alive

Source: Citrus Bits & Wikipedia

We don’t care enough about security on smartphones

- We don’t use good enough authentication
- We don’t configure devices to be secure
- We don’t apply OS or App updates
- We happily connect to networks we don’t know or trust

28% of us don’t lock devices in any way

14% never update their devices operating system

& **10%** never update the apps on their phone

54% use public Wi-Fi networks & …

Many of these users are performing sensitive activities such online shopping (21%) or online banking (20%)

Source: Pew research

More than 1,300 apps per day are added to the Google Play Store (Business of Apps, 2018)

Global app downloads topped 175 billion in 2017 (TechCrunch, 2017)

At least 70% of US users download at least one app per month (TechCrunch, 2016)

Consumer spend in app stores has more than doubled over the past two years, topping $86 billion in 2017

Consumer spending worldwide is projected to top $110 billion in 2018 (TechCrunch, 2018)

Gathering privacy-sensitive information

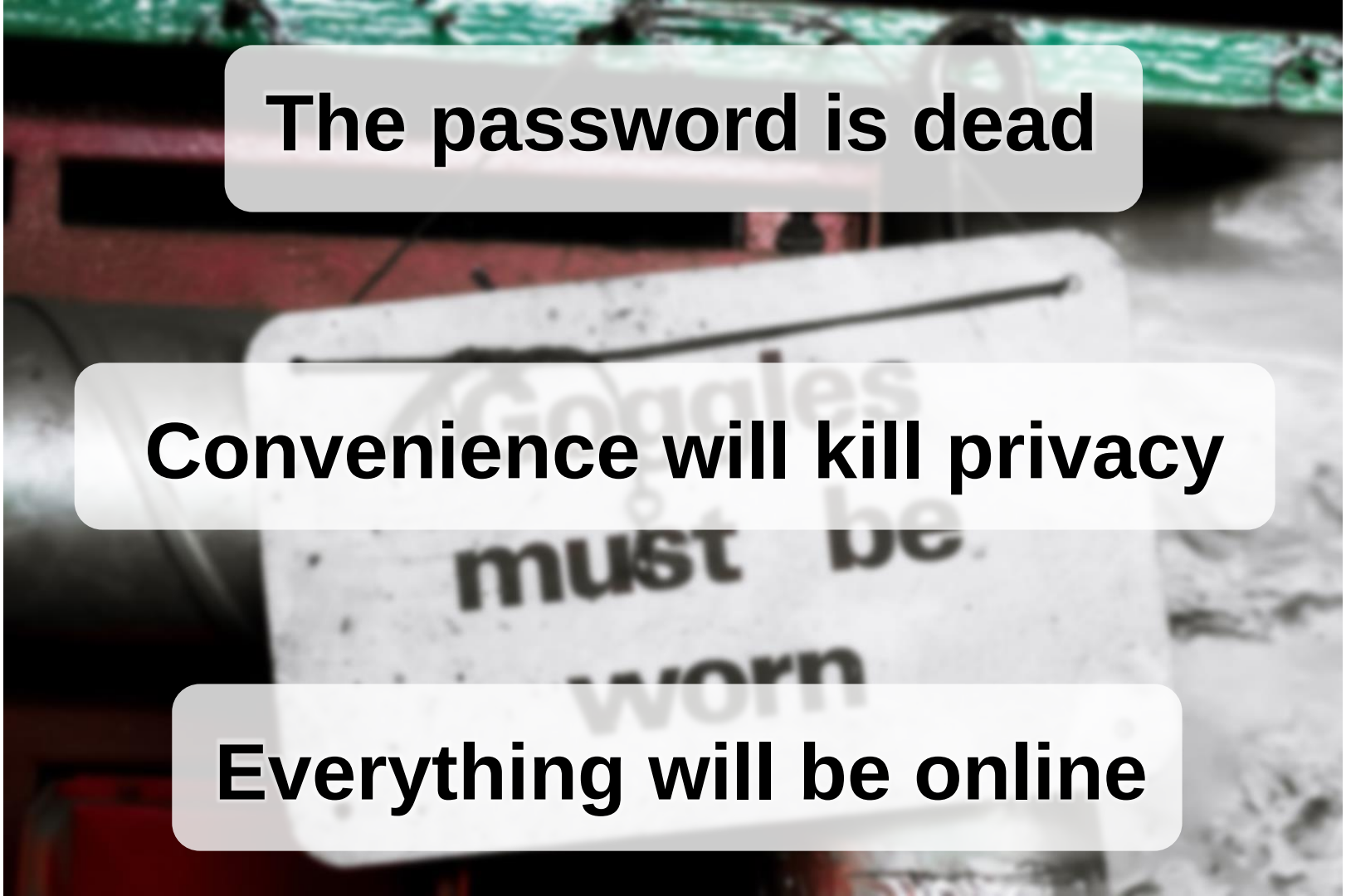
Surreptitious eavesdropping, photo or video recording

Exploiting access to sensitive enterprise networks or data

Ransomware infections

Source: US Dept. Homeland Security, 2017

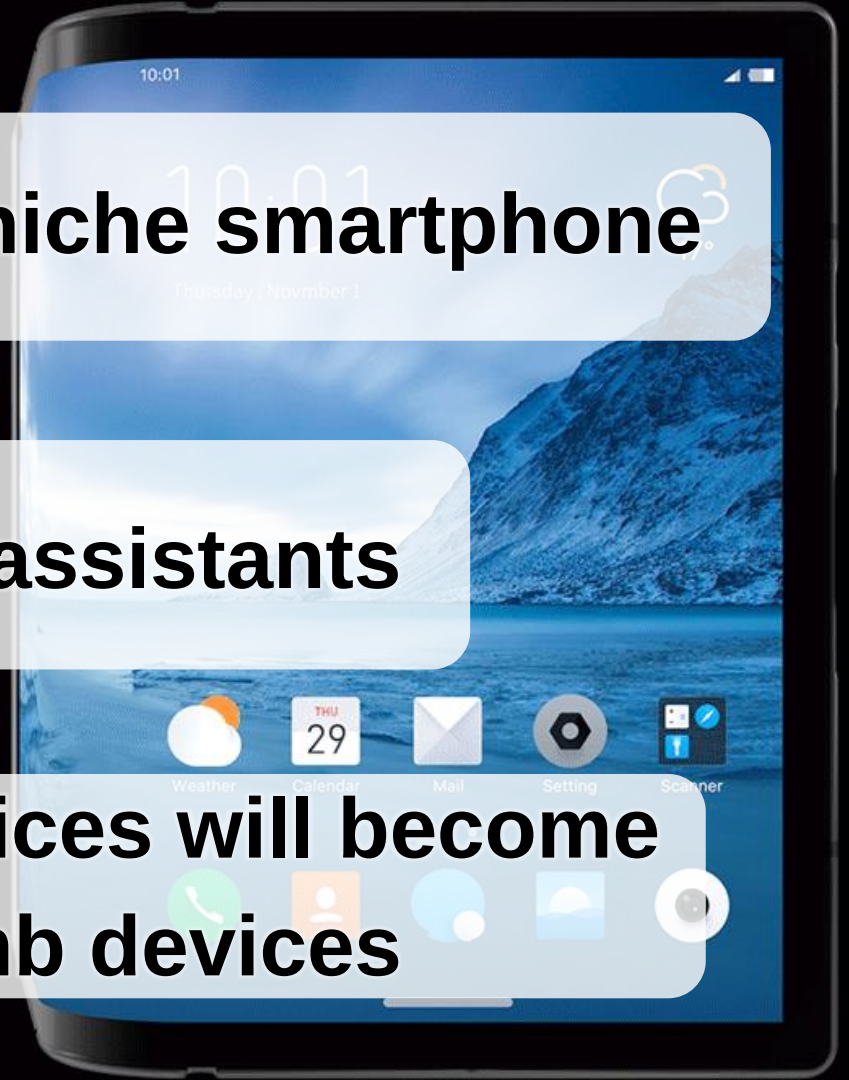
53 Thousand
2,216
65 countries


The password is dead
Convenience will kill privacy
Everything will be online

Rise of the niche smartphone

AI assistants

Smart devices will become dumb devices

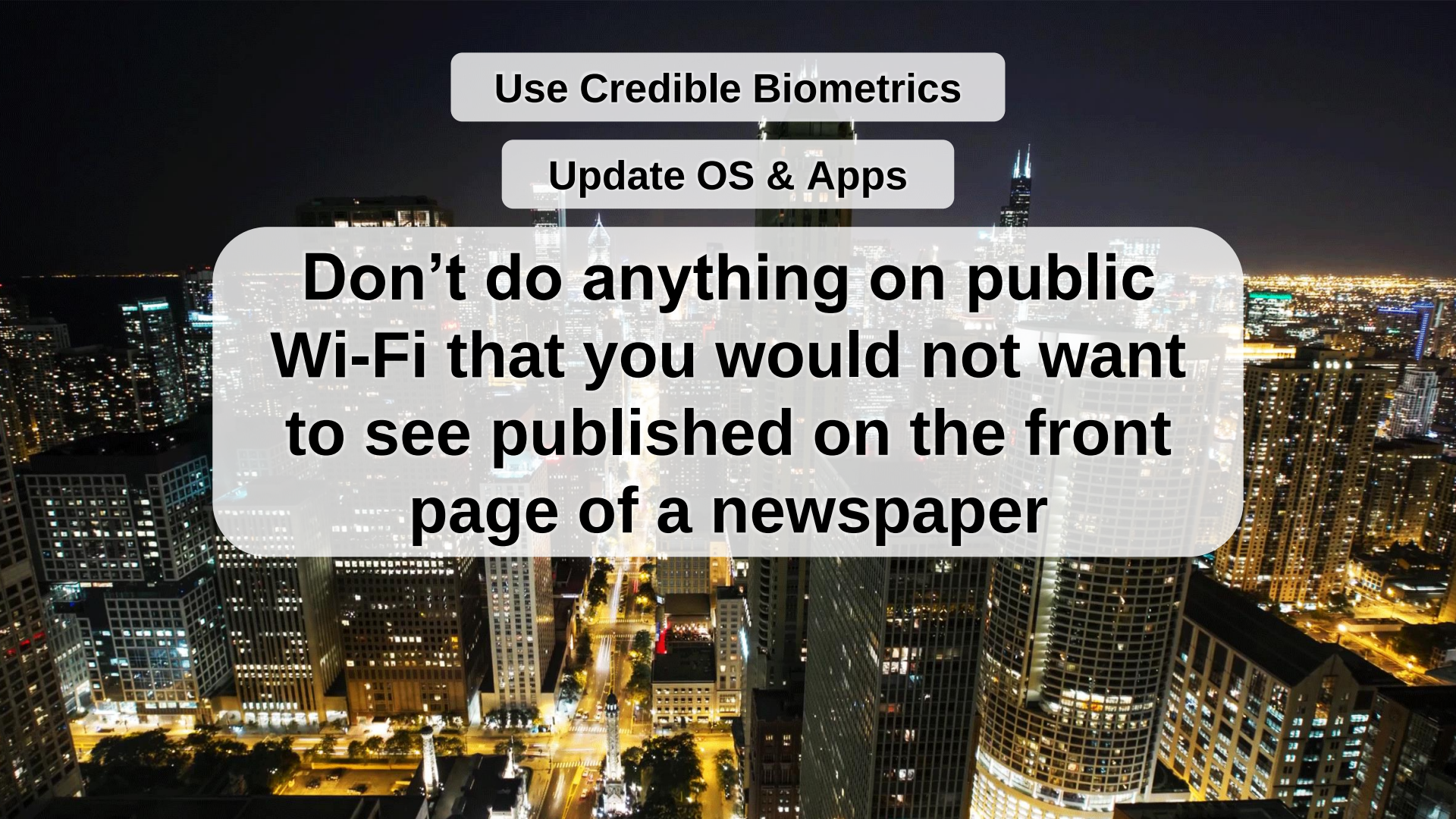


Smartphone Security 101

“Best solution for organizations is the same as with other sources of end-user risk …

a combination of technical tools and a commitment to cybersecurity education”

Source: Dept. Homeland Security, 2017


Use Credible Biometrics
Update OS & Apps
Don’t do anything on public Wi-Fi that you would not want to see published on the front page of a newspaper

Am I downloading this app from either Google Play or the Apple App Store?

Use the ‘30 second check’ to think about at what you are downloading & why

a. Is this from a known company with a lot of apps available?

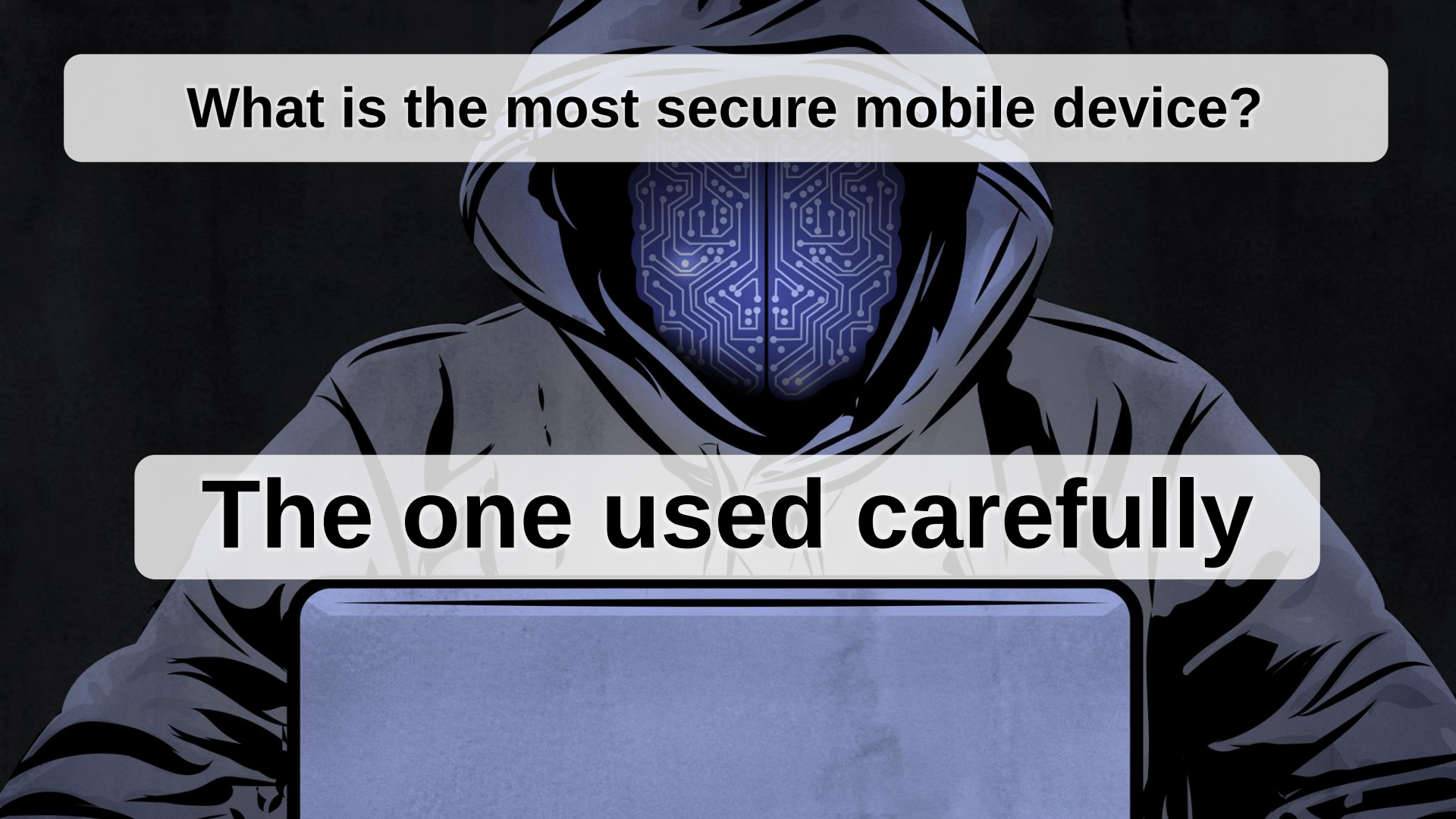
b. How many others have downloaded this & when was it last updated?

c. What have others said about this app and what’s its rating?

Review the permissions when installing an app

a. Are the permissions reasonable for the app to perform what it's supposed to do?

b. On android you can revoke requested permissions after installing but before using the app


What is the most secure mobile device?
The one used carefully

Thank you

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