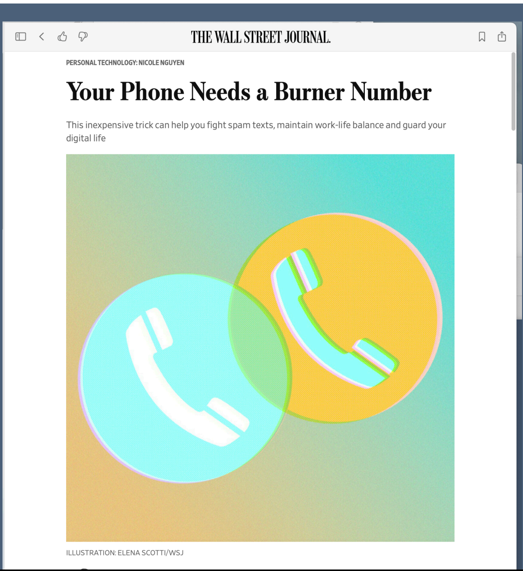
Digital Security

An Introduction



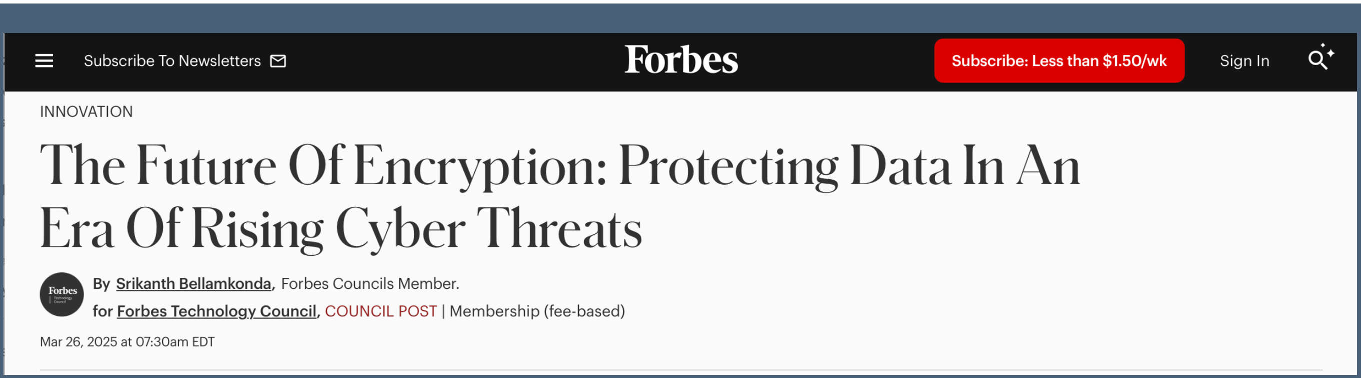
THE WALL STREET JOURNAL.

PERSONAL TECHNOLOGY: NICOLE NGUYEN

Your Phone Needs a Burner Number

This inexpensive trick can help you fight spam texts, maintain work-life balance and guard your digital life

ILLUSTRATION: ELENA SCOTTI/WSJ

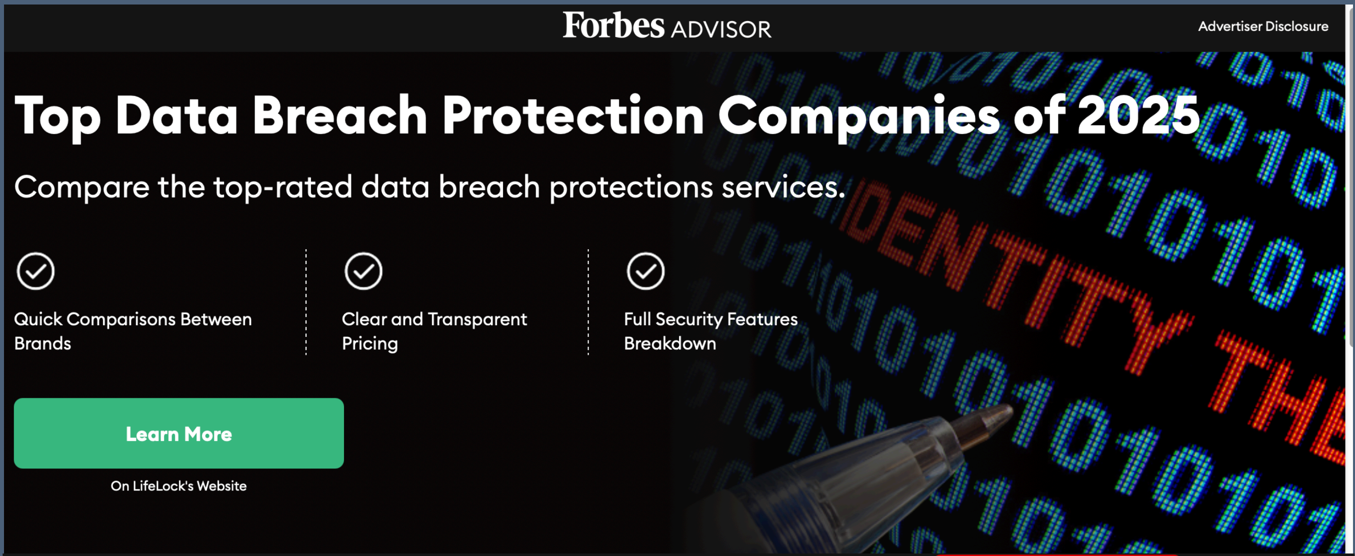


INNOVATION

The Future Of Encryption: Protecting Data In An Era Of Rising Cyber Threats

By Srikanth Bellamkonda, Forbes Councils Member.
for Forbes Technology Council, COUNCIL POST | Membership (fee-based)

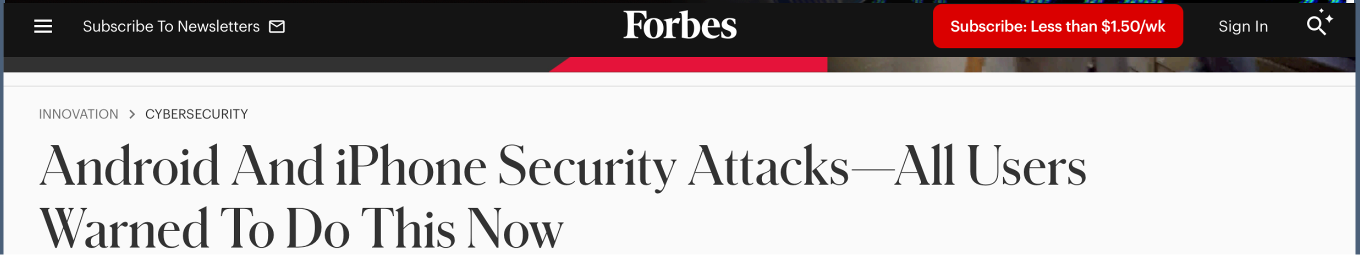
Mar 26, 2025 at 07:30am EDT



Top Data Breach Protection Companies of 2025

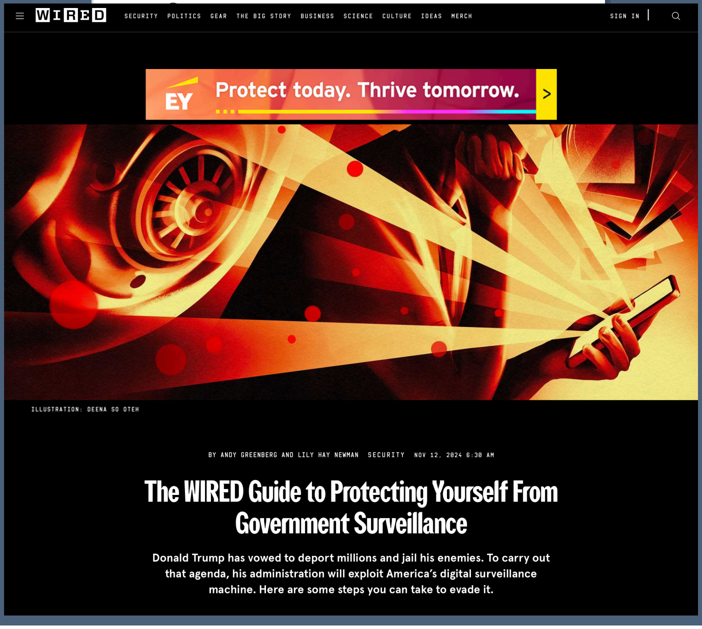
Compare the top-rated data breach protections services.

- ✓ Quick Comparisons Between Brands
- ✓ Clear and Transparent Pricing
- ✓ Full Security Features Breakdown



INNOVATION > CYBERSECURITY

Android And iPhone Security Attacks—All Users Warned To Do This Now



WIRED
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EY Protect today. Thrive tomorrow. >

ILLUSTRATION: DEENA SO OTEH

BY ANDY GREENBERG AND LILY HAY NEWMAN SECURITY NOV 12, 2024 6:30 AM

The WIRED Guide to Protecting Yourself From Government Surveillance

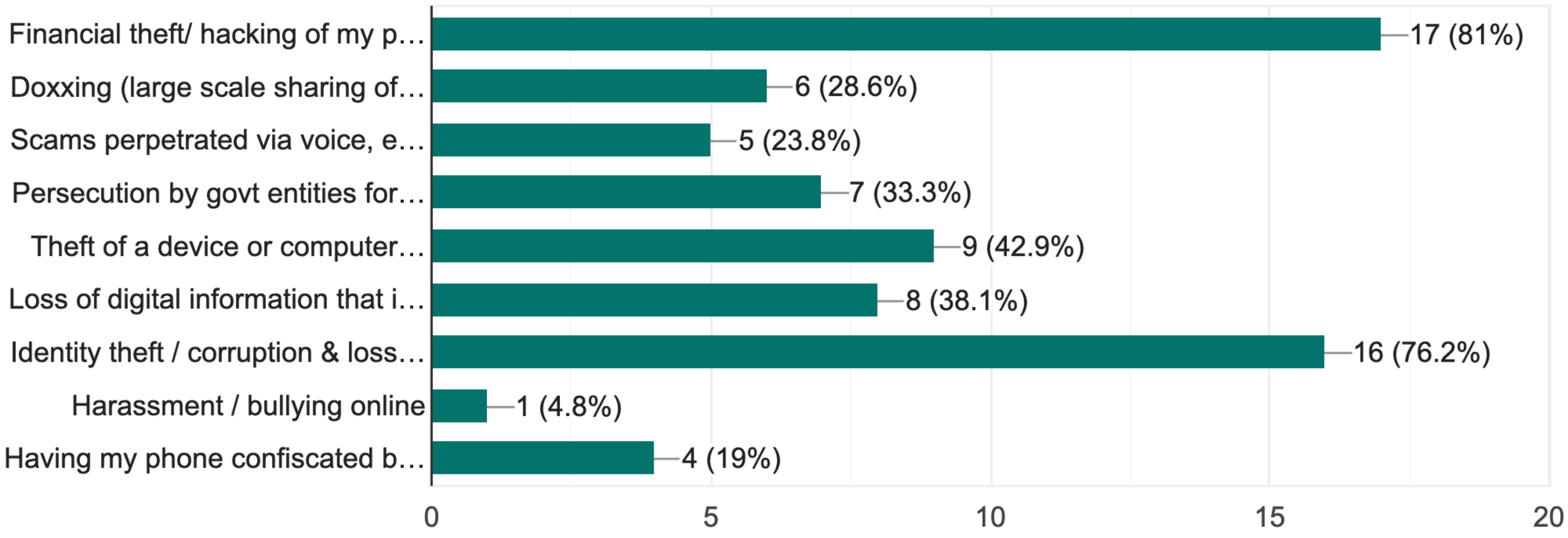
Donald Trump has vowed to deport millions and jail his enemies. To carry out that agenda, his administration will exploit America's digital surveillance machine. Here are some steps you can take to evade it.

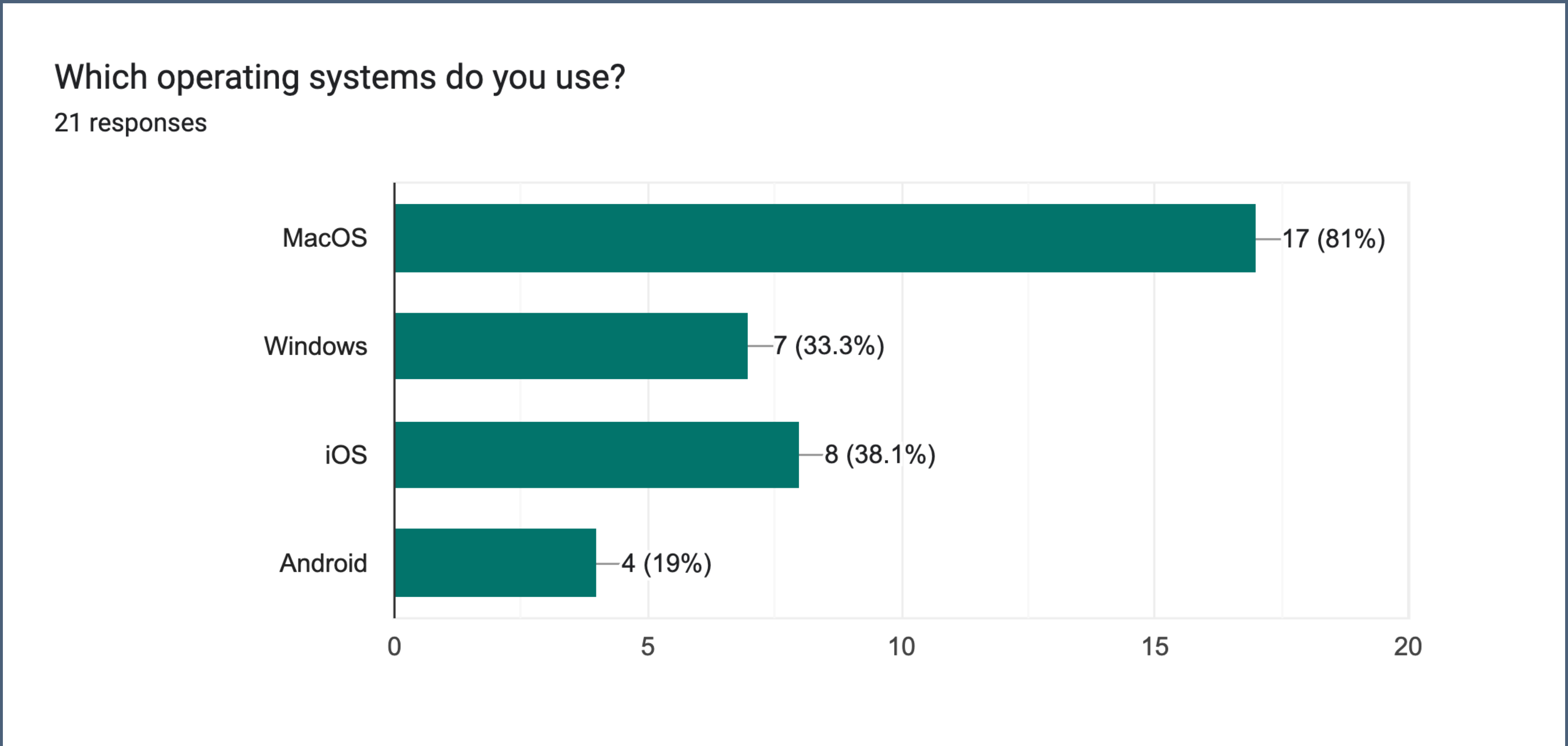
What are the concerns?

A Small Survey

What are your primary digital security/safety concerns? (Pick 2-3)

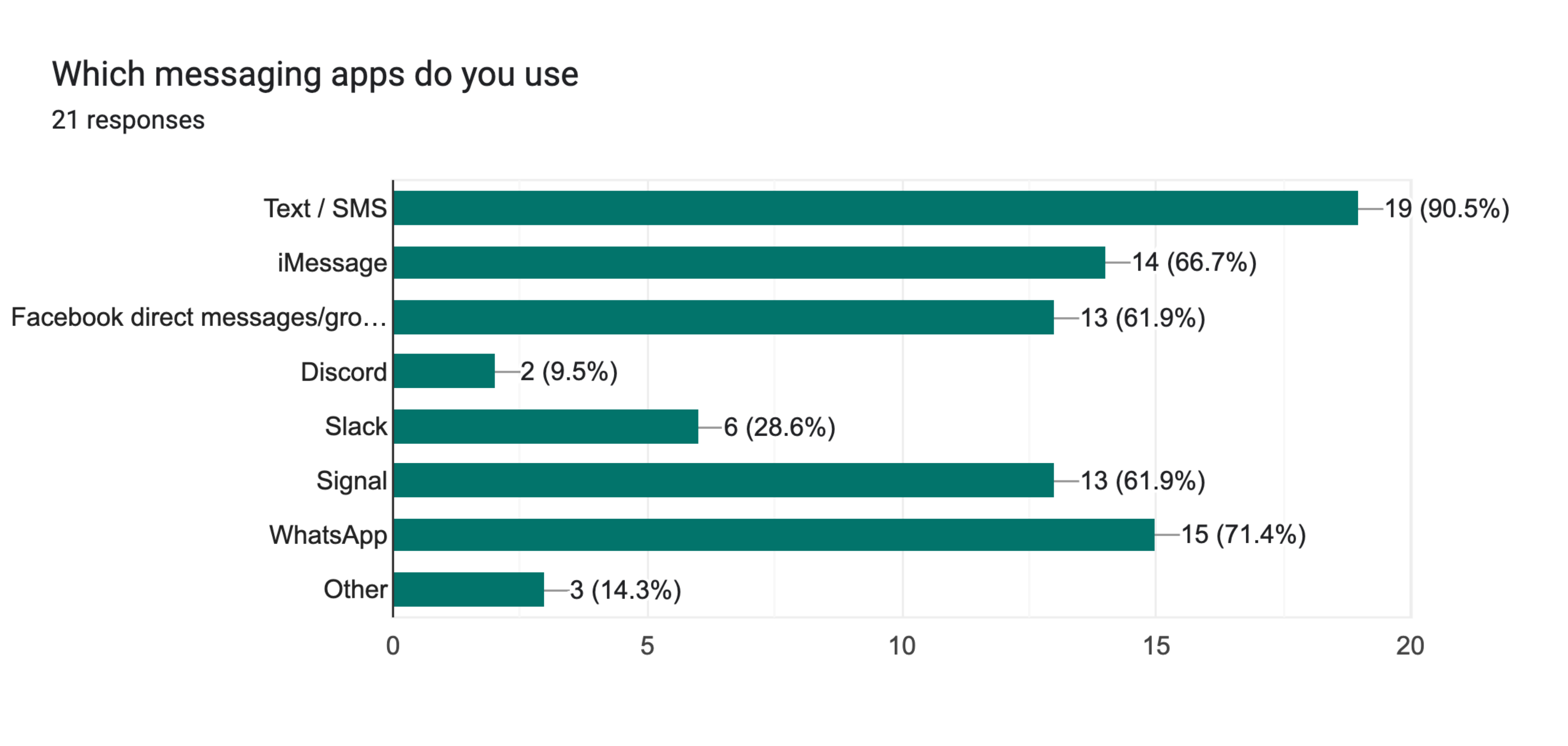
21 responses





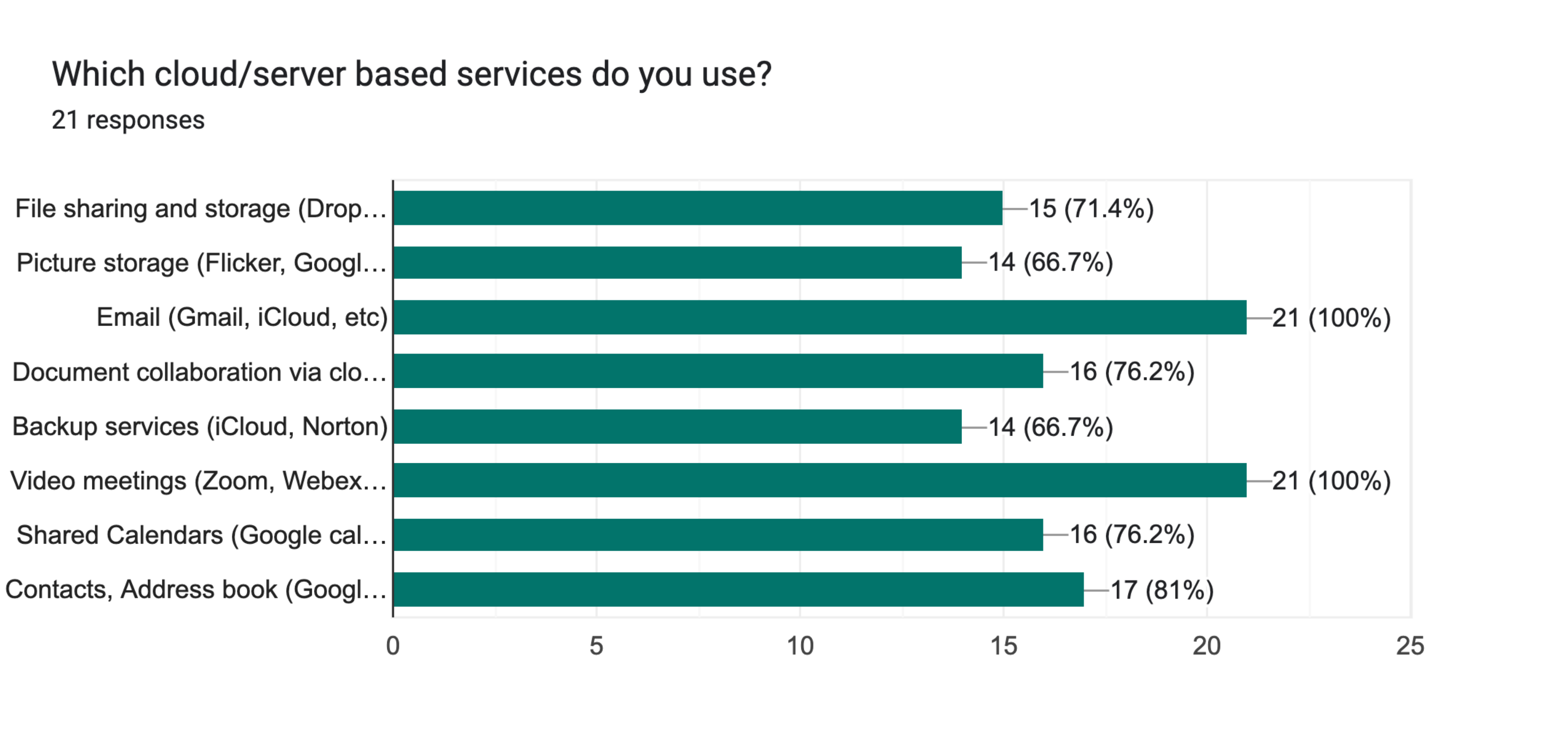
Which operating systems do you use?

21 responses



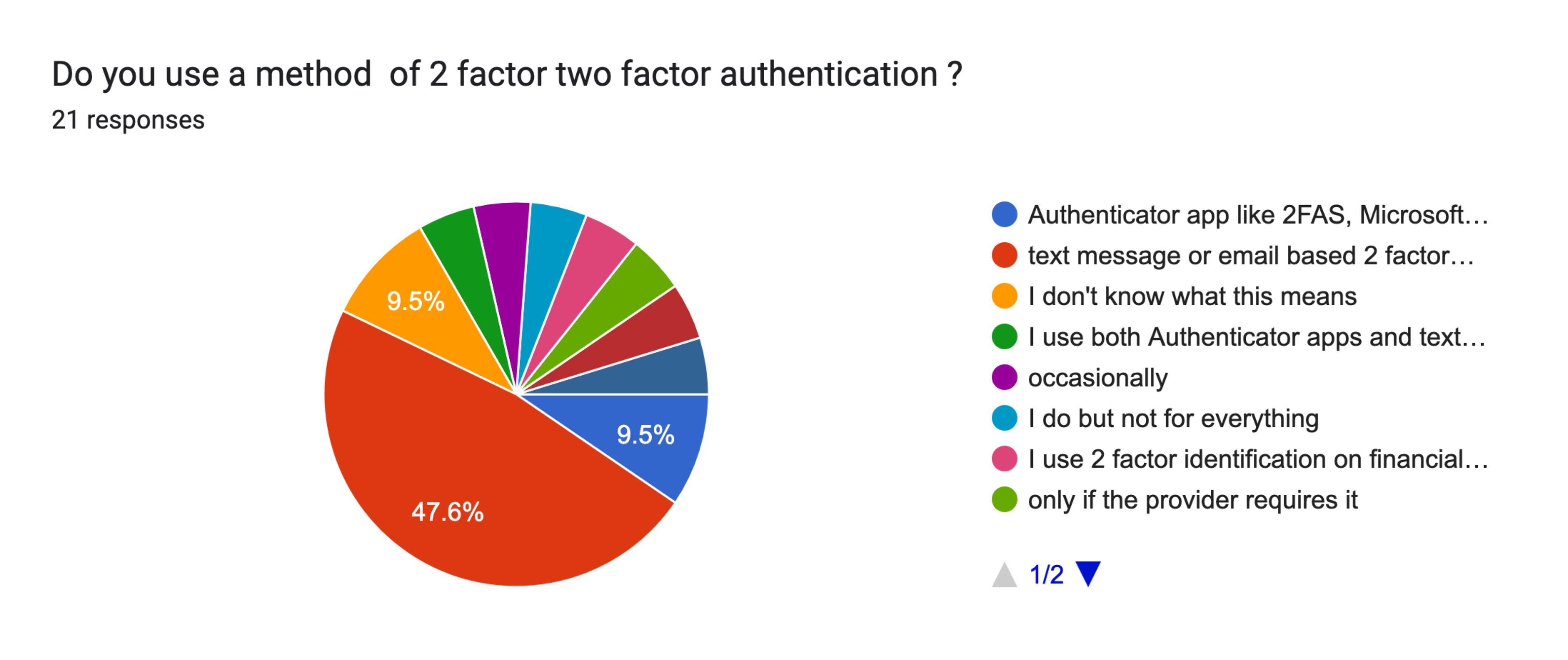
Which messaging apps do you use

21 responses



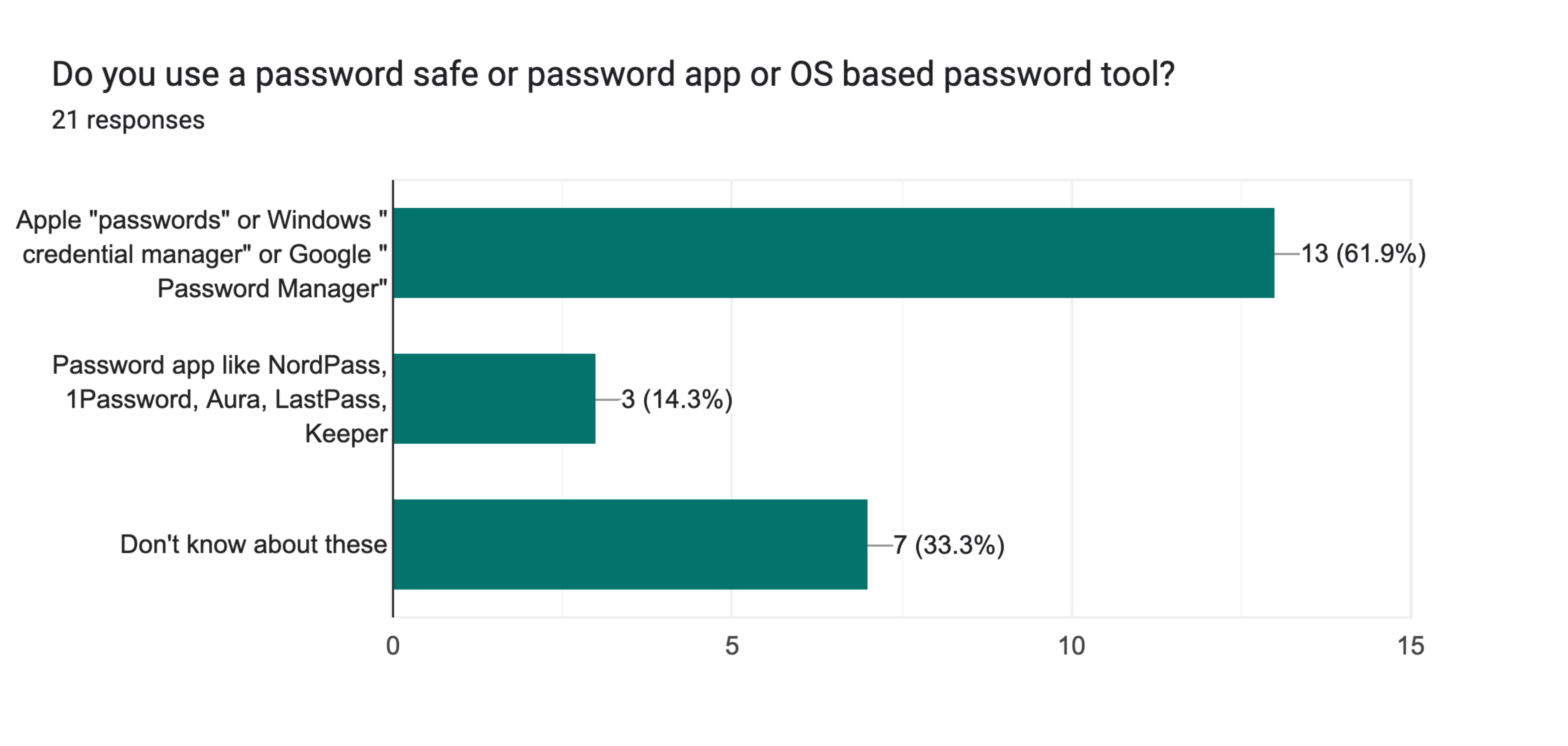
Which cloud/server based services do you use?

21 responses



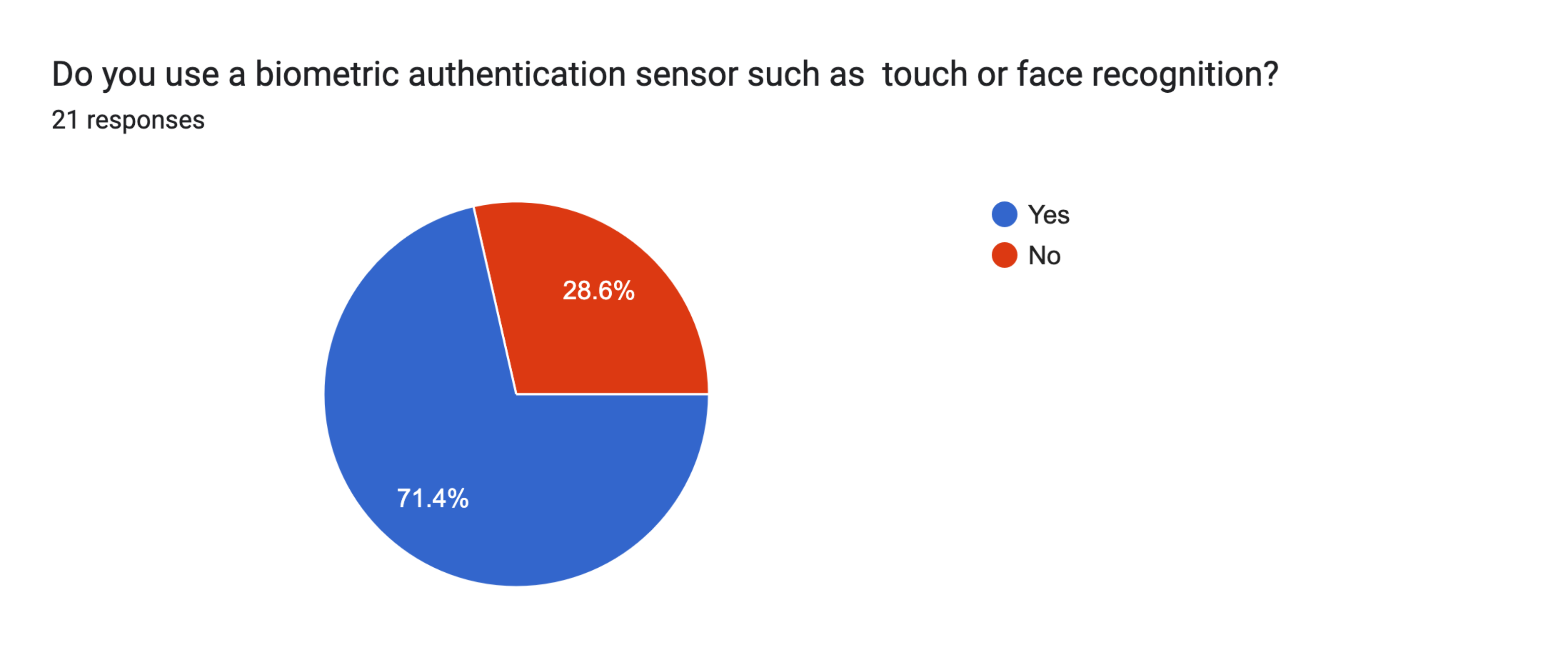
Do you use a method of 2 factor two factor authentication ?

21 responses



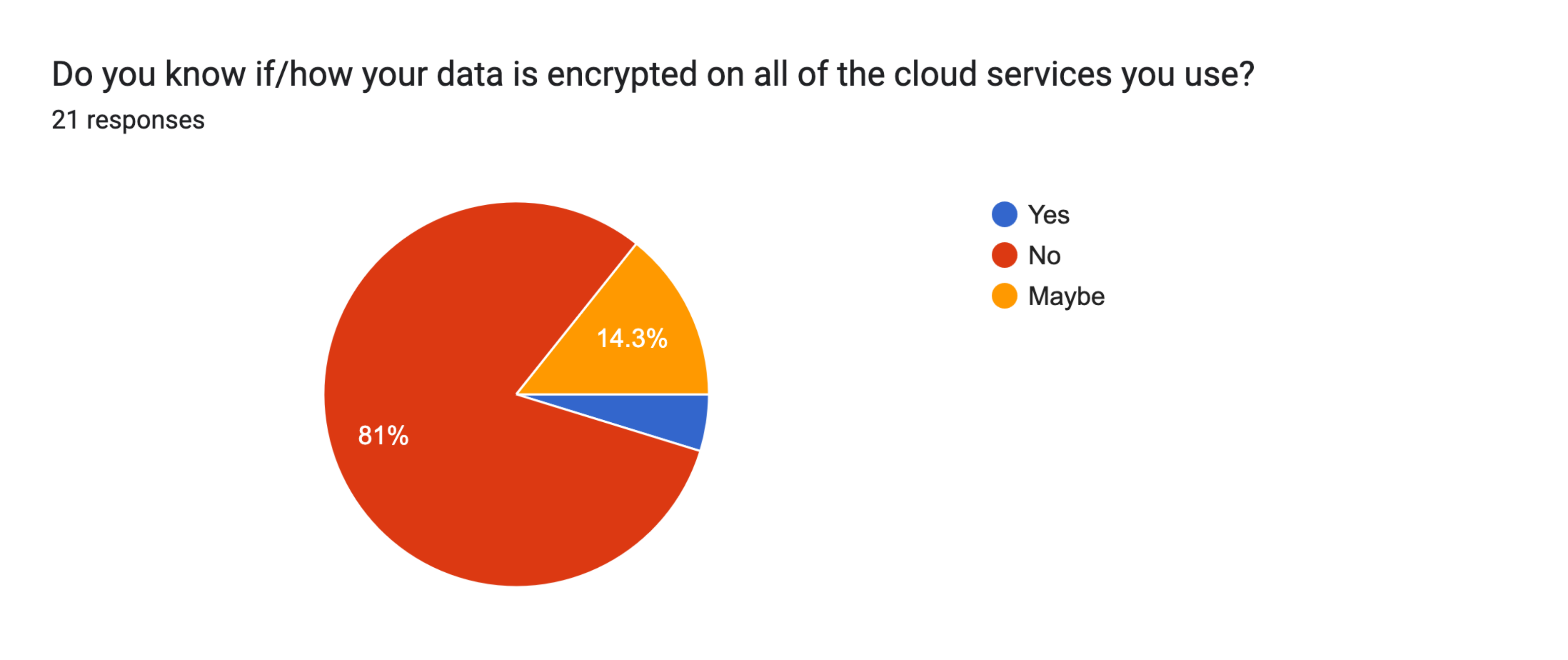
Do you use a password safe or password app or OS based password tool?

21 responses



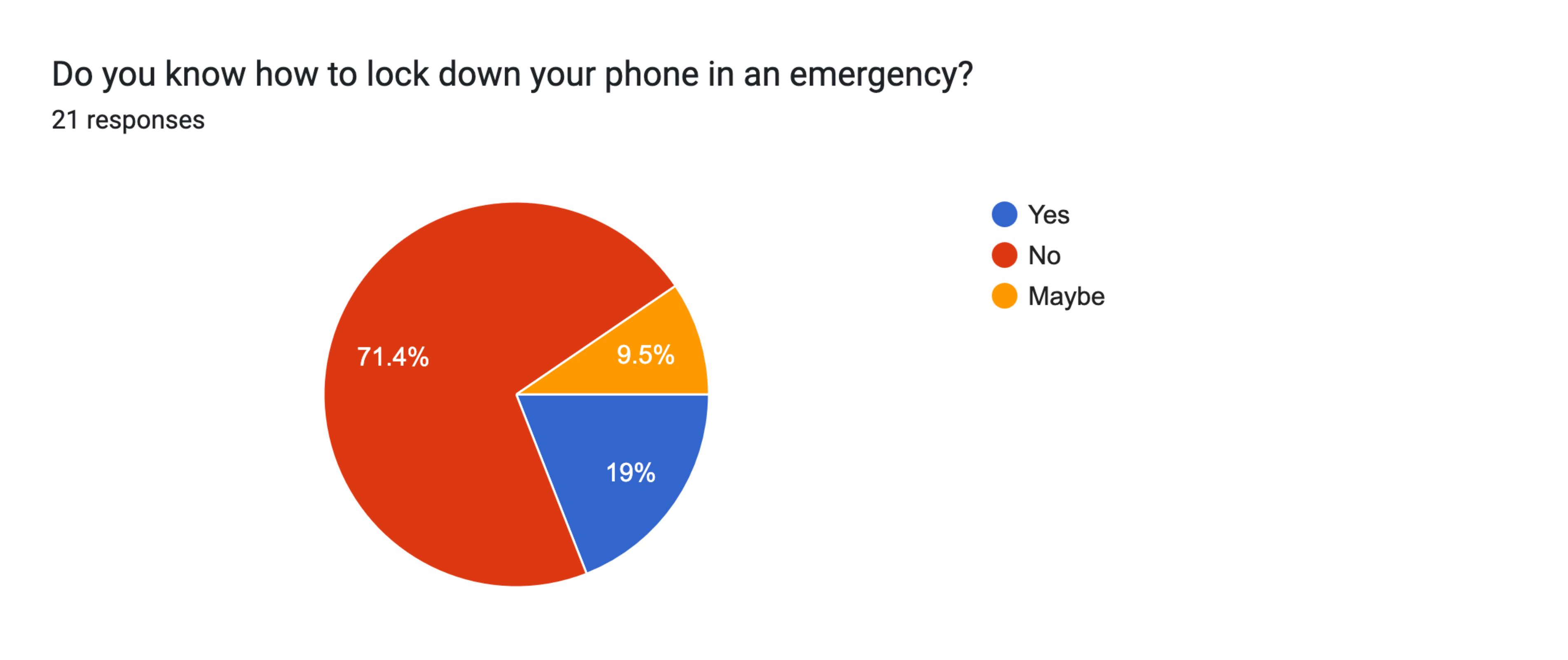
Do you use a biometric authentication sensor such as touch or face recognition?

21 responses



Do you know if/how your data is encrypted on all of the cloud services you use?

21 responses



Do you know how to lock down your phone in an emergency?

21 responses

Device Security

- What is your loss model?
  - Targeted ads/manipulation based on profile ?
  - Businesses revealing private data?
  - Theft of device?
  - Ransomware/loss of important data?
  - Gov't Surveillance?

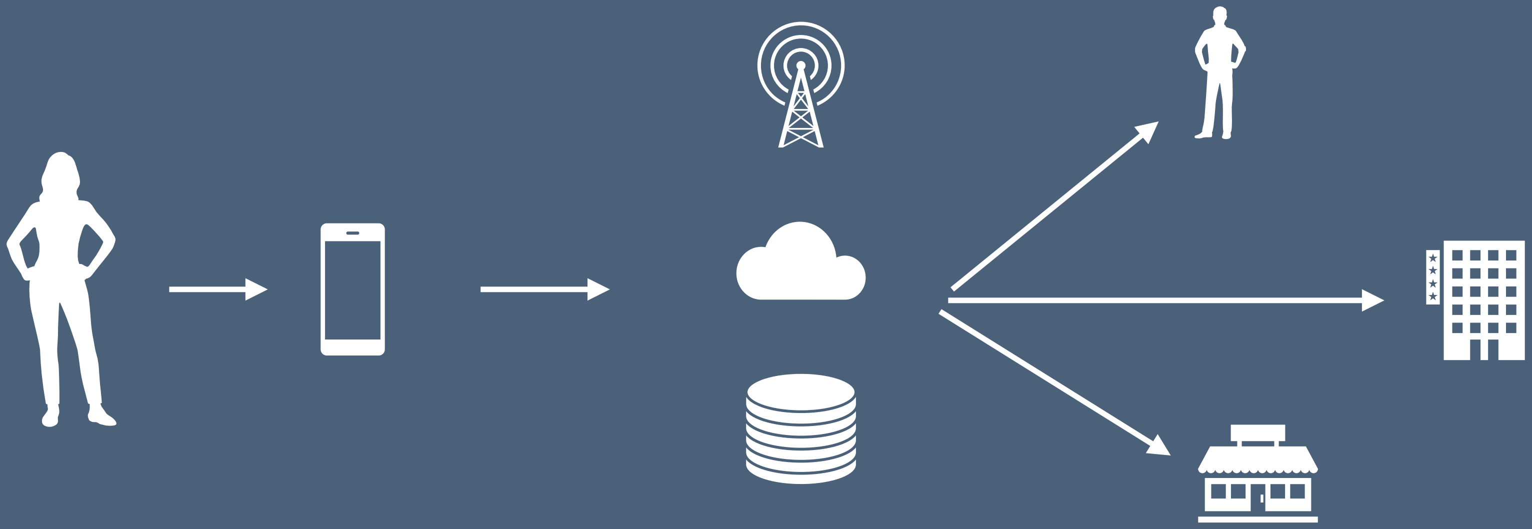
Why is this so hard?

- Business make money by understanding your interests
- Businesses make it more convenient if you give them information ("free")
- The risks are not immediately obvious (not loud, smelly, violent)
- The attack methods are always changing (FastPass scam, package scams)
- Desperate businesses may sell data to survive (23 & me)

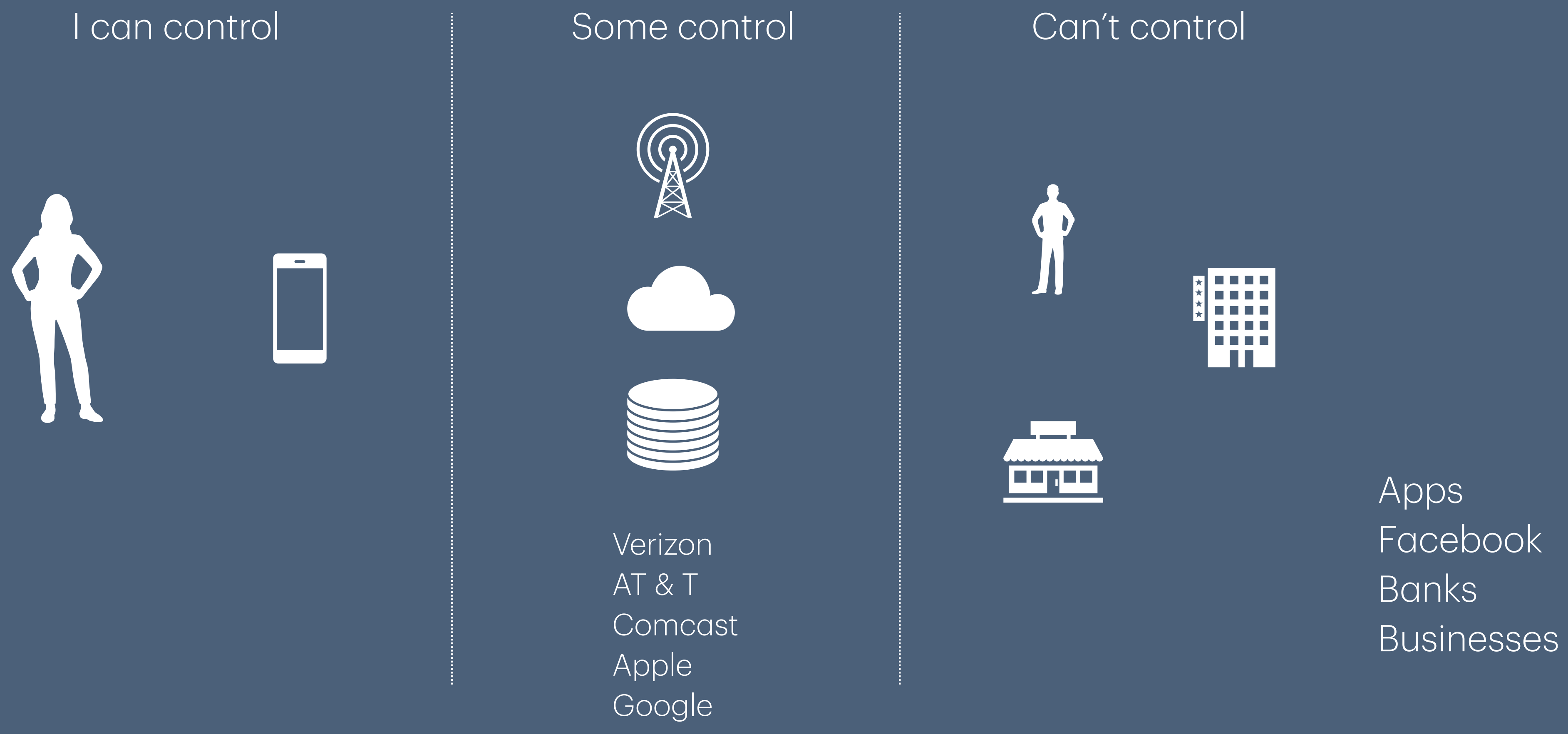
Primary Concern: hacking of personal information

- Who has your data and how secure is it?
  - Data you have - you control how secure it is
  - Data other entities have - you can’t control them
  - Data in transit - visible or not?

How data moves



How data moves



I can control

Some control

Can’t control

Verizon
AT & T
Comcast
Apple
Google

Apps
Facebook
Banks
Businesses

Messaging

	Visible it on my phone	Visible in transit	Some visibility to app developer	Visible to recipient
SMS	✅	✅	✅	✅
iMessage	✅	❌	🤔	✅
What's App	✅	❌	🤔	✅
Facebook	✅	❌	🤔	✅
Signal	✅	❌	❌	✅

Steps everyone should take

- Run Apple “Safety Check” or Android “Account Security Checkup”
- Use 2 factor authentication on all communications when $$ is at stake (or pass key technology)
- Use unique passwords for important logins ($$, identity)
- Say “no” to any dialog asking for access to your phone data (contacts, people, apps, etc). Accept only necessary cookies.
- Set up “https: only” on your browser
- Ignore any message or email that is not from a known sender. Initiate contact through official channels.

Steps everyone should take

- Assume communications are being monitored unless using end to end encrypted app
- Have a backup data strategy - local hard drives, cloud, etc
- https://www.eff.org/pages/cover-your-tracks
- https://privacybadger.org/
-

Steps to consider

- Freeze your credit report
- Use a password manager
- Use your phone primarily for communication and delete unused apps frequently.
- Only conduct transactions with wallet or payment apps (not banking apps, store apps)
- Look at Privacy Report in Settings (Apple users). Consider restricting apps
- Use encryption when storing data in the cloud

More extreme solutions

- Consider using an second older phone for most personal data and use a passcode. Use a primary as a stripped down "old style phone"
- For insecure places, travel with a burner phone using a separate cloud account. Turn off biometric authentication
- Stop sharing photos/documents on Social Media and free storage websites (Google, Box, Drop Box). Only store data in encrypted files with a password.
-

Emergencies: Someone might have my password(s)

- Change affected password immediately
- Call the business
- Review password safe/storage to see if password is duplicated elsewhere
-

Emergencies: My phone is about to confiscated

- iPhone
  - Squeeze buttons on side until you see power off.
  - Do not unlock you phone or reveal your passcode. Ask for a lawyer
- Android
  - <Same?>

Web Browsing

- Most secure browsers: Private mode (Firefox, Safari, Edge)
- More secure browsers: Firefox, DuckDuckGo
- Less secure browsers: Safari, Chrome, Edge
- Browser settings to watch: Trackers, cookies, hide IP address,

Resources

Articles

https://www.eff.org/pages/tools

https://www.privacyend.com/digital-identity-and-privacy/

https://www.privacyend.com/guides/online-privacy-guide/

https://www.wired.com/story/signal-tips-private-messaging-encryption/

https://www.wired.com/story/best-password-managers/

https://spycloud.com/blog/what-to-do-password-exposed-data-breach/

https://www.identitytheft.gov/

https://support.apple.com/guide/personal-safety/safety-check-iphone-ios-16-ips2aad835e1/web

https://www.consumerreports.org/digital-security-privacy/

https://www.inc.com/jason-aten/signal-whatsapp-and-imessage-which-messaging-app-is-most-secure/91167562

Resources

- Password Safe Utilities: 1Password, Apple Passwords, NordPass, Aura
- Digital security services
  - https://www.consumerreports.org/electronics/personal-information/services-that-delete-data-from-people-search-sites-review-a2705843415/