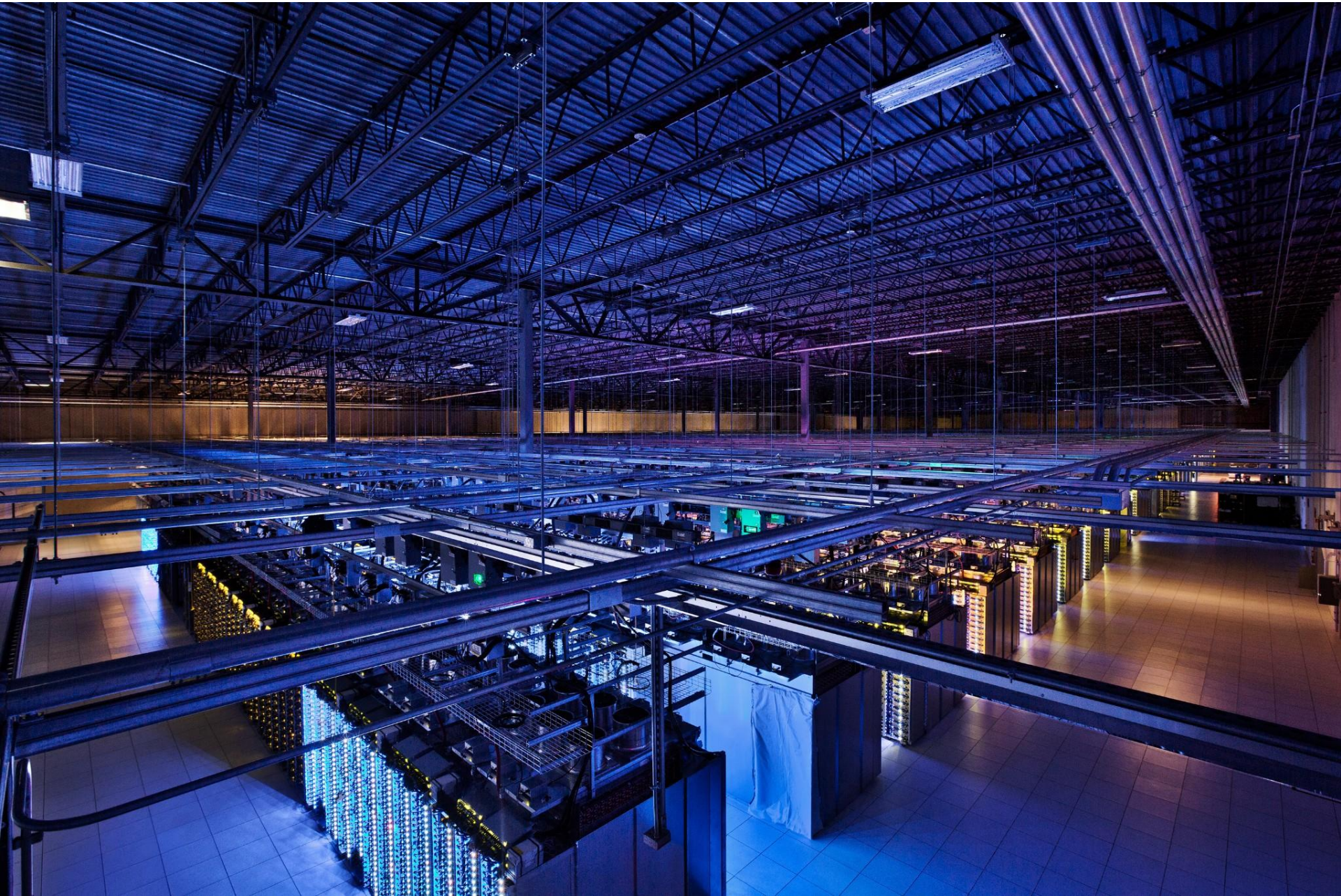


SaTC 2012 wishlist

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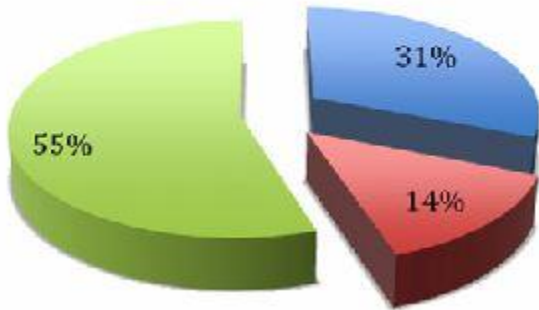


What keeps me awake at night:

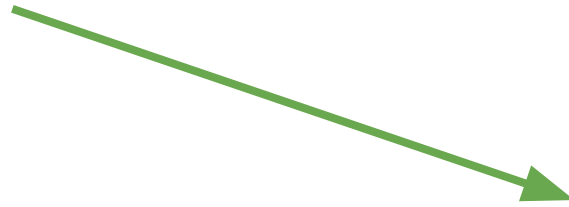
1. **malware**, mostly on client machines
2. user, employee, machine, and service **authentication**
3. network **intercept**, such as RootCA compromise
4. product **vulnerabilities**, such as XSS or misconfiguration
5. **espionage**



Zeus and AV



trend: dumb terminal to dedicated device



device-centric auth



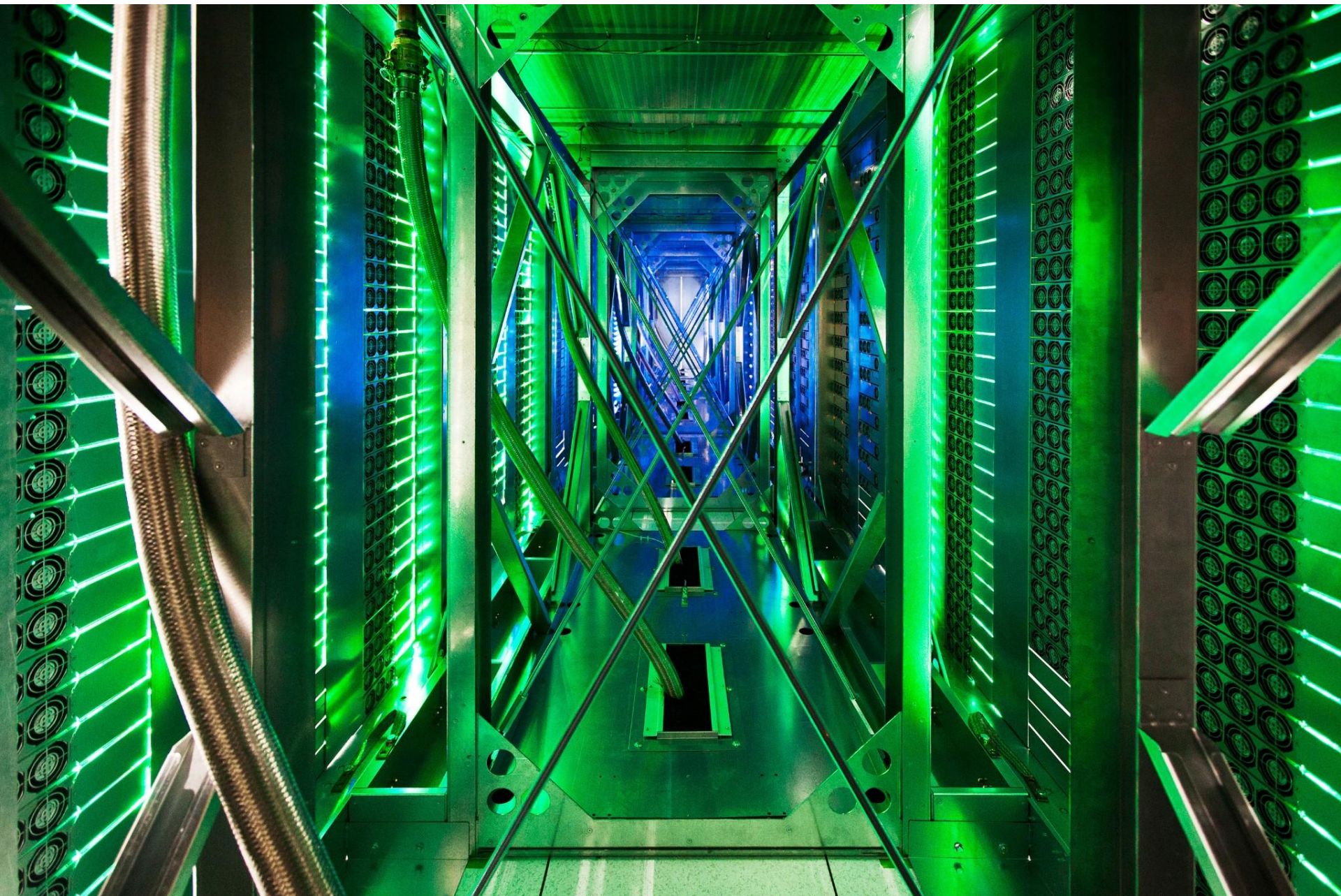
- client device holds strongly asserted identity (public key crypto)
- "blessed" by owner at acquisition, from existing devices
- device has long-term account access, for update/ring/...
- revoke quickly and selectively when lost, or abuse detected

- protect physically and by operating system
- shared devices(1): system-isolated accounts
- shared devices(2): family machine with scoped delegation

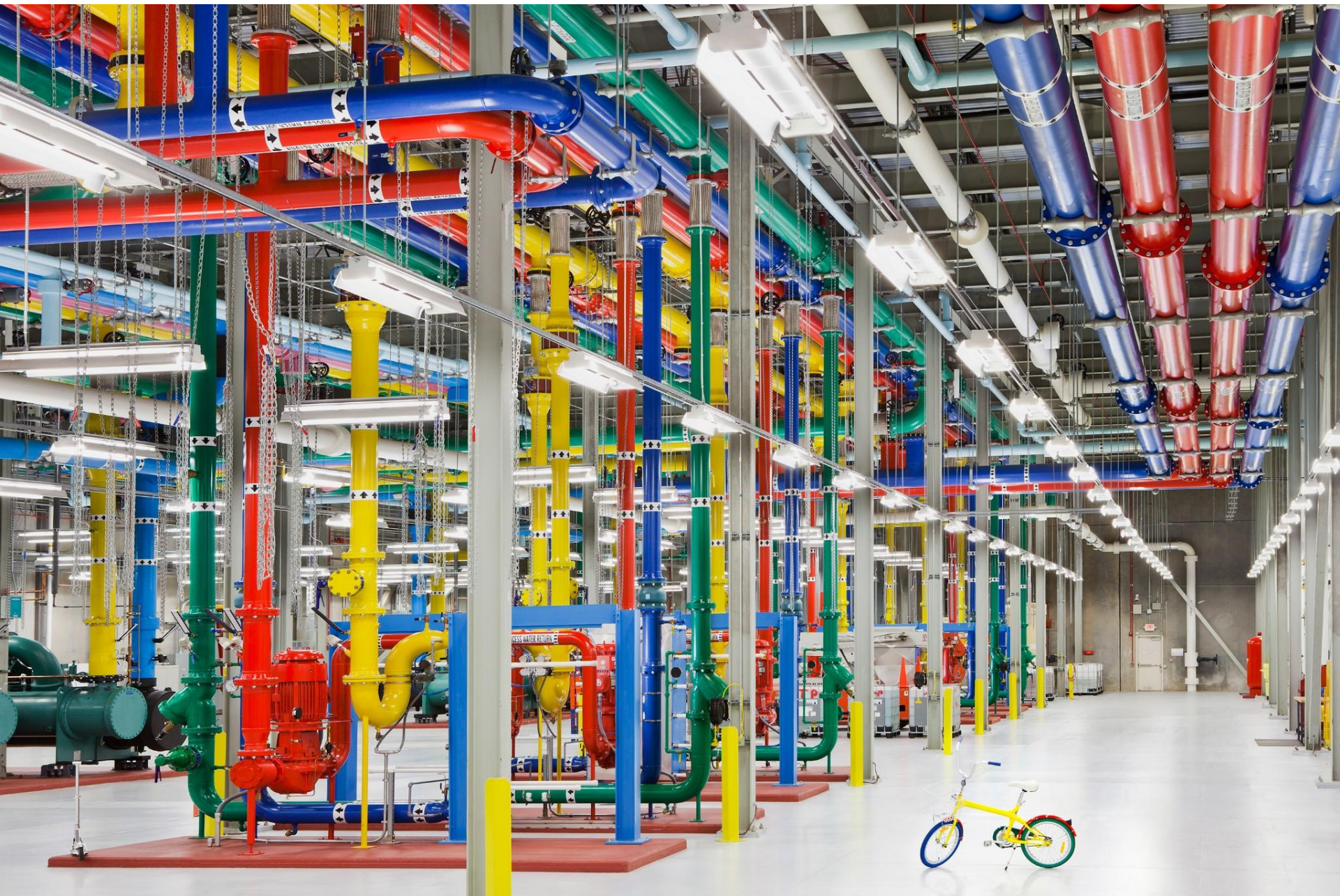
- supplement with high-value transaction confirmation



hardened systems; app isolation



beyond OS: fuzzing, web app vuln, SQLi, ...



recovery after attack

undo

but expect root escalation, distant network
biggest concern: theft of user data
modification not *yet* an observed threat

how to adjust derived data?

how to assist, not replace, self-help?





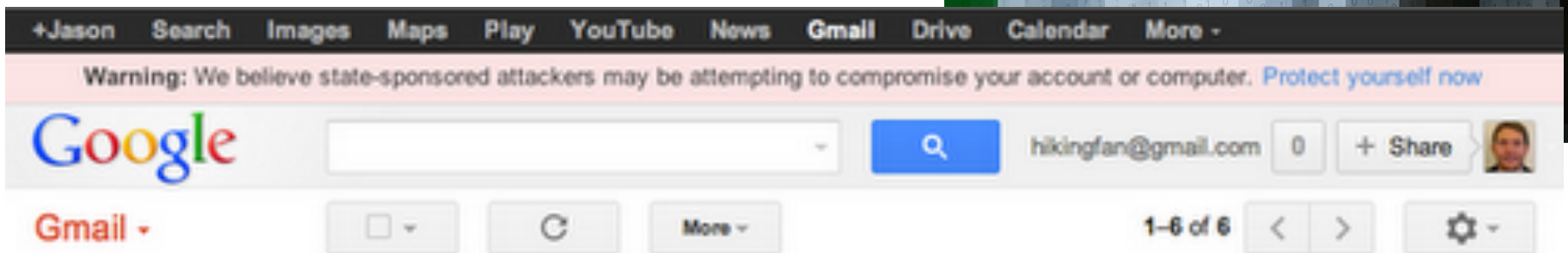
social engineering, malware

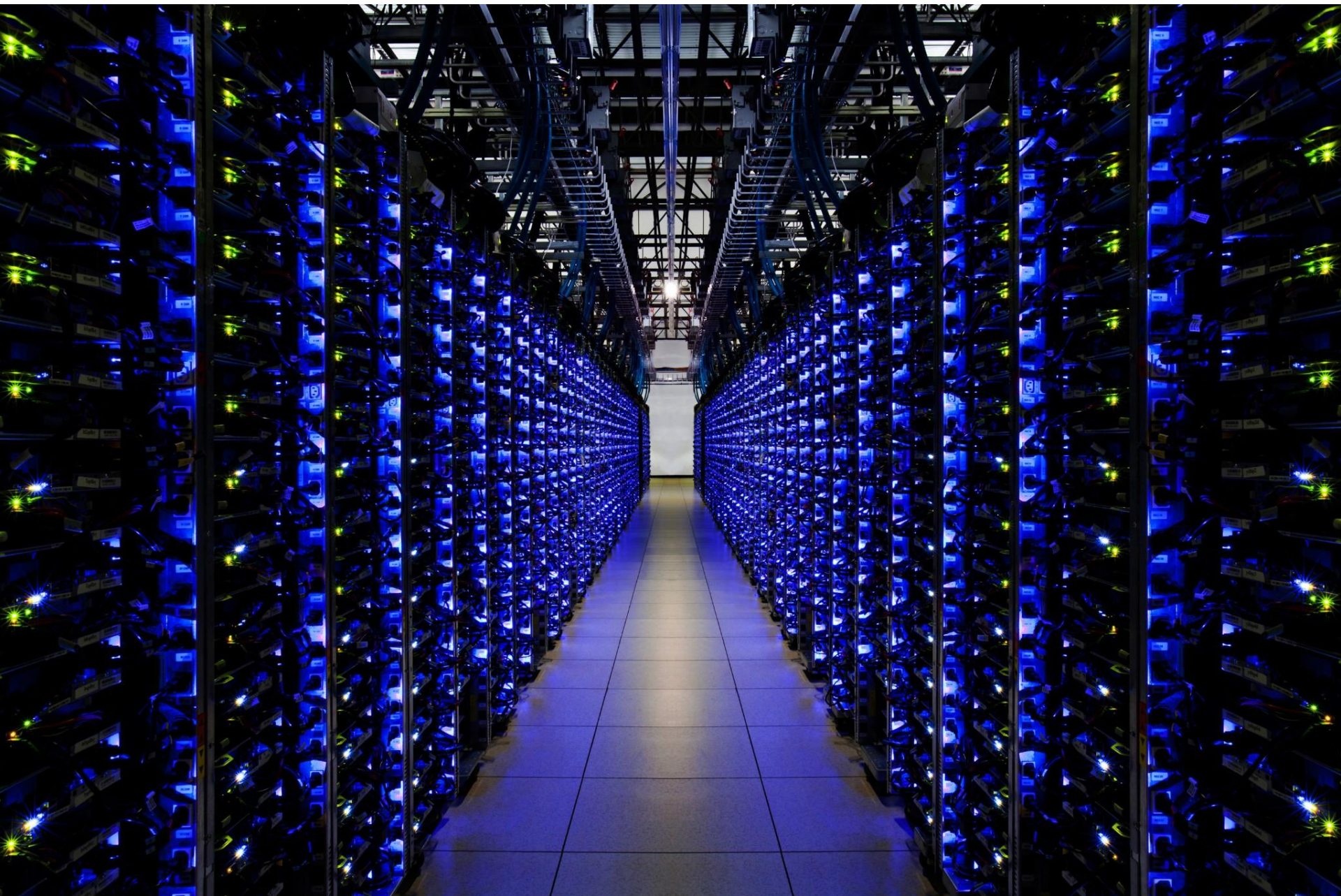
password reuse - Fallows

pw hash - LinkedIn, Bloggtoppen

account recovery - Palin, Honan

**need: stronger mental models,
tested on real users**





www.google.com/about/datacenters/gallery