

ASSOCIATIONS AND THE “INTERNET OF THINGS”

Presented by:

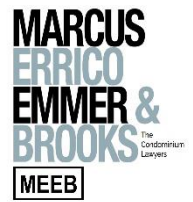
JUSTIN MAGSARILI
jmagsarili@meeb.com

GARY DADDARIO
gdaddario@meeb.com

MARCUS, ERRICO, EMMER & BROOKS, P.C.

MARCUS, ERRICO, EMMER & BROOKS, P.C. | 603.420.9475 | WWW.MEEB.COM

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A glowing lightbulb is the central focus, set against a blue-tinted background with faint circuit patterns. The lightbulb is illuminated from within, casting a warm glow. The background features a large, faint circular shape and several circuit-like lines with nodes.

WHAT IS THE “INTERNET OF THINGS” (AKA “IOT”)?

All Things “Smart”

- Internet connected devices allowing network/internet connections, interactions, and exchange of data.
- Ever-growing: light bulbs, kitchen appliances, scales, door locks, garage door openers, doorbells, thermostats, security cameras, cars

Massively popular

- Over 10 billion devices by current estimates
- Estimated to pass 25.4 billion devices within 10 years.

Likely attractive to associations for convenience and simply to keep up with the times.

ASSOCIATION DEVICES



SMART LOCKS



SMART
THERMOSTATS



SMART SECURITY
CAMERAS



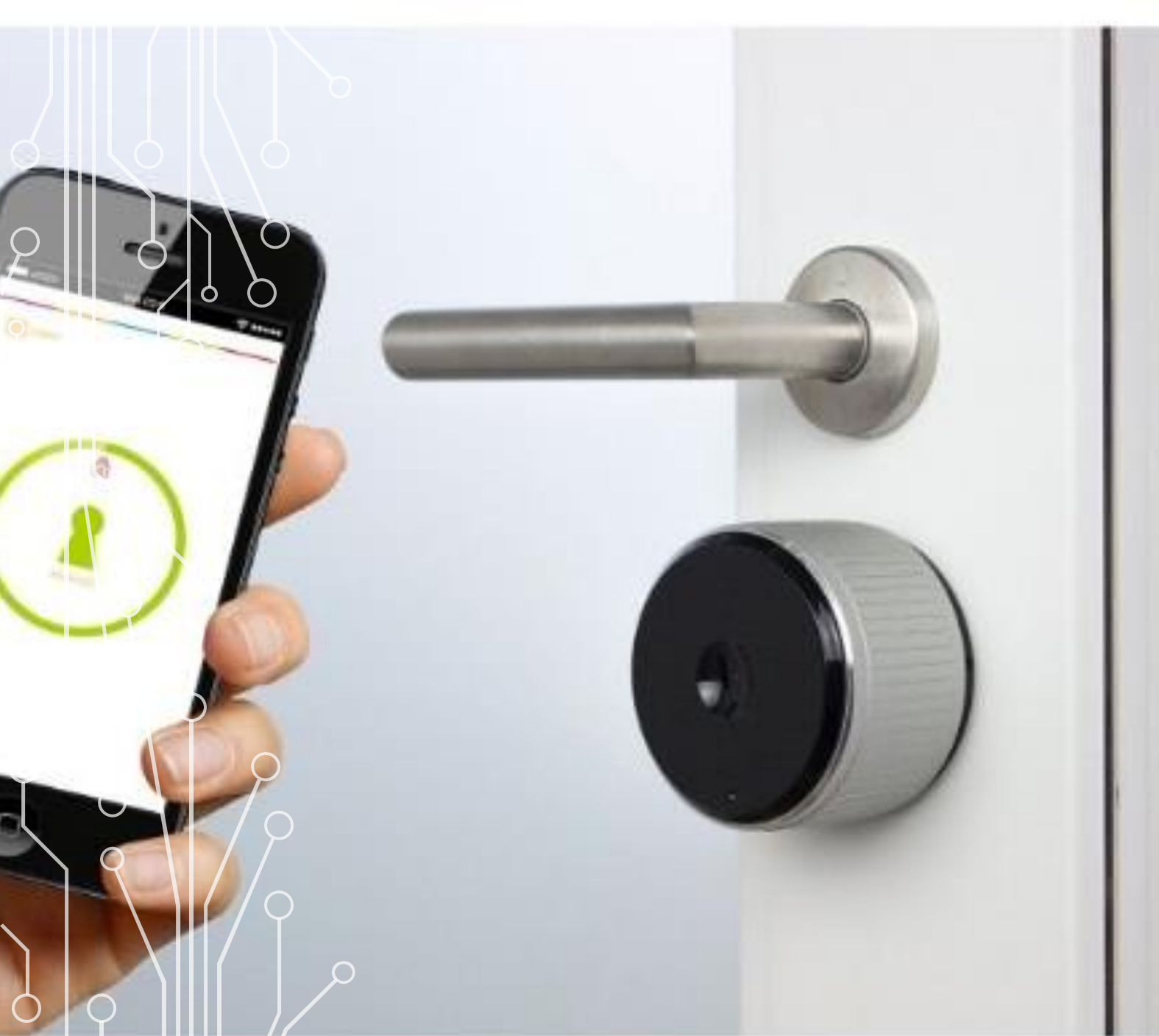
VIDEO DOORBELLS



INTERNET ENABLED
MOISTURE SENSORS

A glowing lightbulb is the central focus, with its filament illuminated. The background is a soft, light blue gradient. Overlaid on the lightbulb and background is a white circuit board pattern with various lines and nodes. A dark, rounded rectangular box is positioned in the center, containing the text 'DEVICE ADVANTAGES'.

DEVICE ADVANTAGES



SMART LOCKS

- Can provide residents access to common doors via cell phone apps
 - Save hassle of obtaining and controlling keys for everyone
 - Residents can remotely provide access for guests without distributing keys



WIRELESS CAMERAS VIDEO DOORBELLS

- Cloud storage, no need for tapes or hard drives
- Board or management can access live feed or recordings instantly and from anywhere.
- Deter misconduct
- Easier setup than wired systems



SMART THERMOSTATS

- Easier to program than traditional versions
- “Learn” activity patterns and adapt programming
- Board or management can check temperature settings remotely and adjust as needed
- Board or management can remotely check actual temperature to monitor for potential HVAC failures



LEAK/MOISTURE DETECTORS

- Can provide Board or management with instant alerts of leaks
- Some models include temperature monitoring to detect freezing temps
- High-end models include water shutoffs

FINANCIALS

- Higher initial cost than traditional, non-internet options
- May require community authorization
 - May be required by law
 - In Massachusetts, may require improvement vote under M.G.L. c. 183A, § 18.
 - Documents may impose restrictions on improvements
 - Consult with the association's counsel

M.G.L. C. 183A, § 18

(a) If fifty per cent or more but less than seventy-five per cent of the unit owners agree to make an improvement to the common areas and facilities, the costs of such improvement shall be borne solely by the owners so agreeing.

(b) Seventy-five per cent or more of the unit owners may agree to make an improvement to the common areas and facilities and assess the cost thereof to all unit owners as a common expense . . .

- Certain devices can lead to long term/future savings
 - Thermostats can help climate control operate more efficiently
 - Leak detectors, especially with automatic shut-offs, can help limit damage from leaks

Security:

- The web is inherently risky
 - E.g.: Colonial Pipeline shutdown, Massachusetts Steamship Authority
 - Spambot campaigns
 - More than 100,000 IoT devices, including routers, smart TV sets, and even a smart fridge, were the subjects of a cyberattack that took over the devices and used them to send out spam emails in massive numbers
 - Mirai botnet attack
 - Worked by breaching poorly-secured IoT devices and using them in a coordinated dedicated denial of service (DDoS) attack, which targets a server by simply bombarding with web traffic until it's overwhelmed and knocked offline.

- Smart Locks
 - Ransomware attack could lock everyone in or out of the building
 - Hacker could gain access digitally
- Internet-connected Cameras
 - Hackers could access audio/video feeds (and possibly even talk to/harass residents via the device)
 - Hackers could access recordings stored on the cloud
- Smart Thermostats
 - Hackers can manipulate temperature settings or lock you out of the system

UNIT OWNER CONVENIENCE AND CONCERNS

Smart locks provide ease of building access via smartphones, etc.; Ability to provide access to guests (especially helpful for buildings without intercom buzzer systems)

- Concerns regarding overall security of systems

Save the association money, save the owners money (thermostats and leak detectors)

Data privacy concerns

- If association installs a smart lock operated through an app on a unit owner's phone, the app may harvest data from the unit owner's phone activity, including location history

Freedom to opt-in/op-out

A glowing lightbulb is the central focus, with its filament and base visible. The background is a soft, light blue gradient. Overlaid on the background are faint, white circuit board traces that connect to the lightbulb's base and extend across the frame. A dark, rounded rectangular box is positioned in the center, containing the title text.

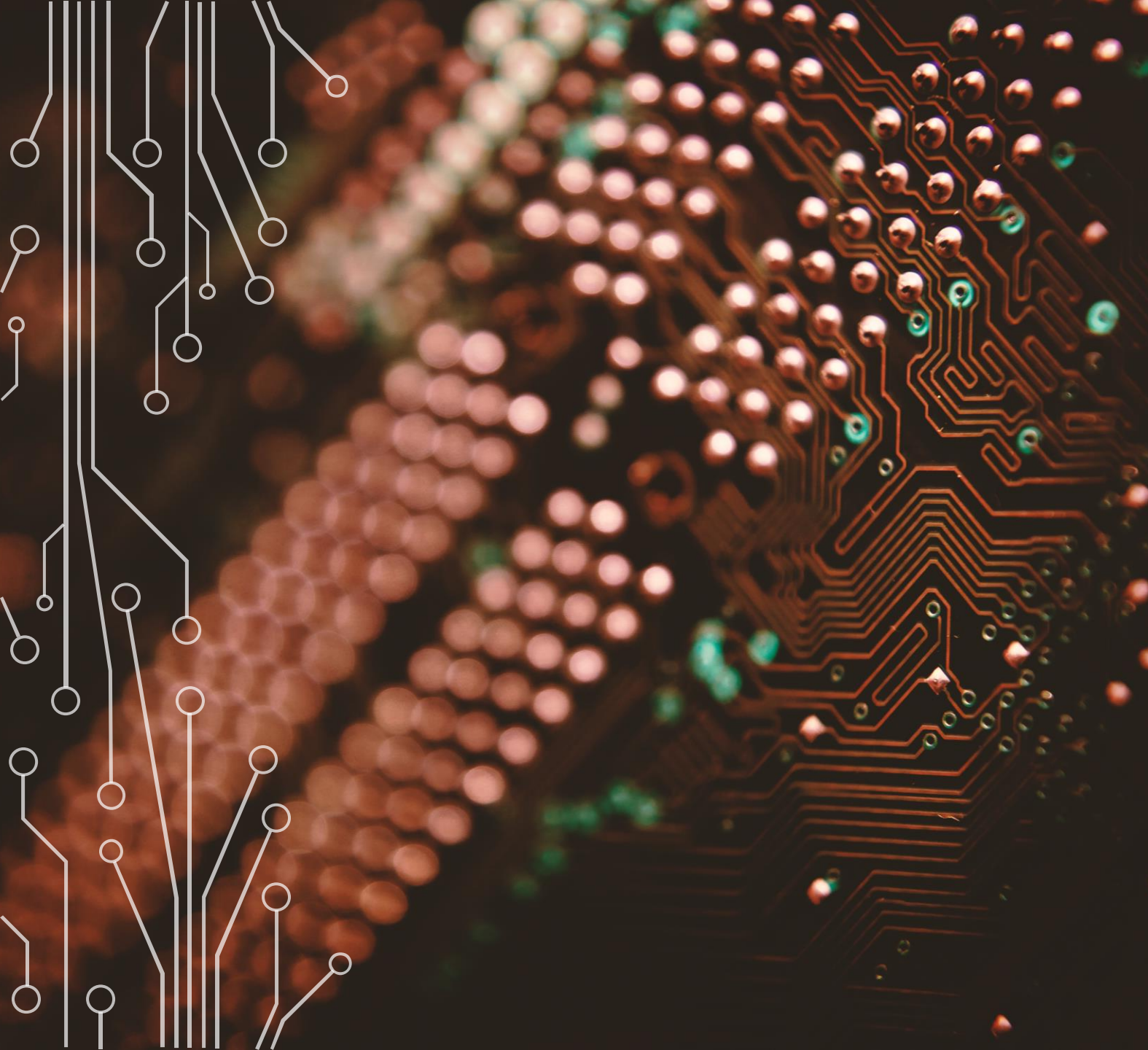
ASSOCIATION PITFALLS AND LIABILITY



NEW AND DEVELOPING AREA

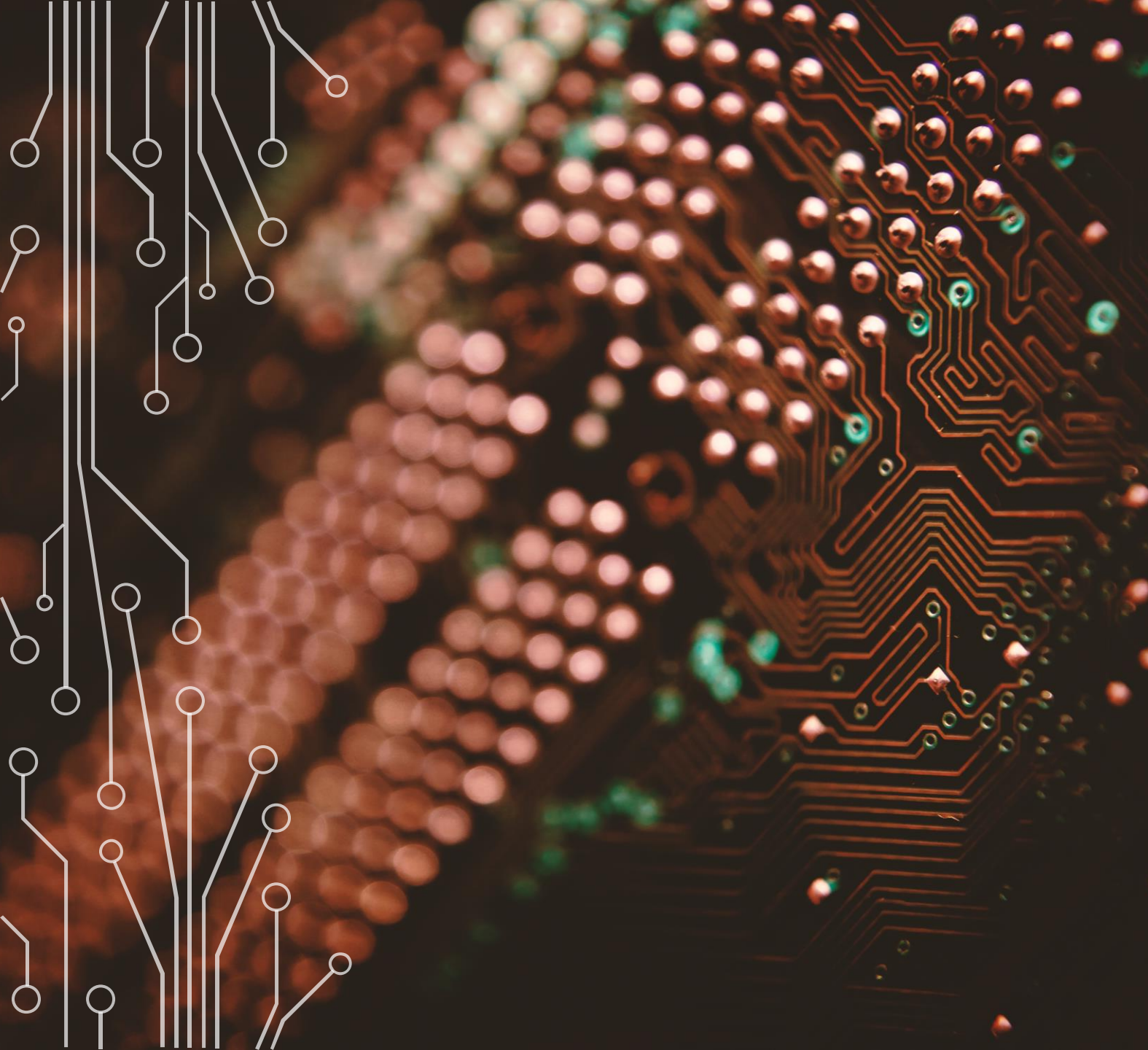
Can association be held liable for bad acts committed against residents through association devices (that unit owner may or may not have had a say in installing)?

- Person hacks smart lock to access building and victimizes residents/units inside
- Hacker steals recordings of resident patterns and habits in building
- Hacker takes over camera/intercom device and harasses/abuses residents



Most smart devices harvest location, activity, and network activity information, which the manufacturers store

- If manufacturer suffers data breach, is association liable to unit owners for their information being stolen?
- Nearly 4,000 confirmed data breaches in 2020 alone
- Association might face same requirements as the data collector in terms of notifying owners of the breach.



Ransomware attacks

- Paying ransoms can lead to fines from federal government

Courts have taken an “in for a penny, in for a pound” approach

- Though boards generally not liable for wrongful acts of third party, where boards have dabbled somewhat in security measures, courts have analyzed liability on basis of board involving itself in the matter of security

Private networks made public:
Amazon Sidewalk

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FINAL ADVICE

BEST APPROACH:

Identify a product and assess pros and cons. Where consequences may be relatively simple & chance of being targeted is not high, likely worth approaching (e.g, thermostats) Where consequences are greater and chance of being targeted is higher, may want to wait until a more secure product available (e.g., smart locks).



Work with an expert in the field who is familiar with the technology and can provide advice and suggest most secure options.



Q&A

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