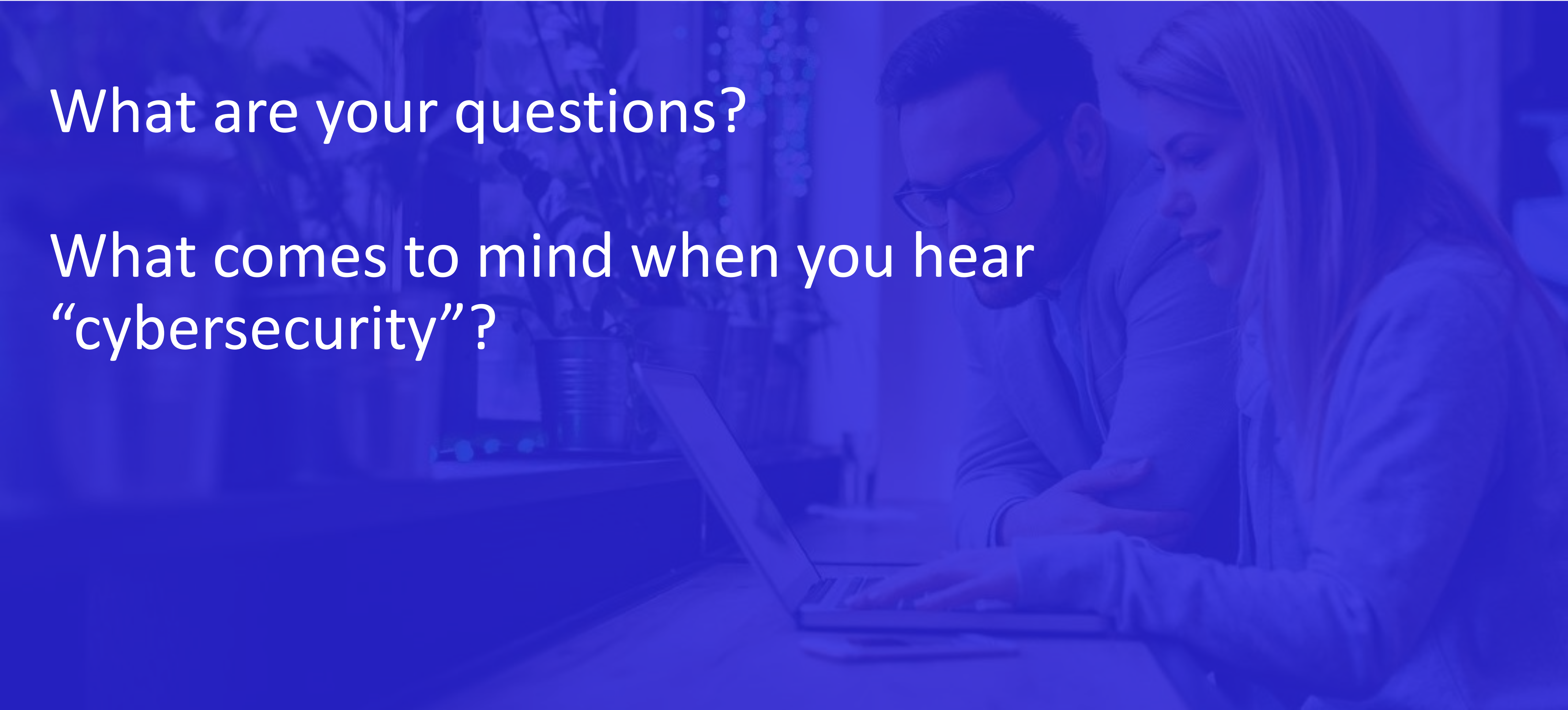
7 Mistakes You’re Making in Cybersecurity as a Non-Technical Leader

▶ STAY OUT OF THE HEADLINES

FIRST THOUGHTS



What are your questions?

What comes to mind when you hear “cybersecurity”?

Today’s Reality

THE STATE OF CYBERSECURITY

- Texas is #3 in the U.S. for Malware attacks
- We are spending more than ever on cybersecurity
- Breaches are more rampant than ever.
- Ransomware slowed in Q1 2023, but rebounding heavily since April

Today’s Reality

THE STATE OF CYBERSECURITY

- Traditional Network Security is Failing
- How did we get here?
- It’s not your fault!

What is your cybersecurity strategy?

How does security actually WORK?

IT’S A SYSTEM, NOT JUST TOOLS

Doors	Alarm	Dog
Windows	Motion	Gun
Locks	Crime W	Police
Fence	Monitoring	Insurance
Protect	Detect	Respond

What does your city need from technology?

Staff	Support
Security	Strategy

IT Governance:

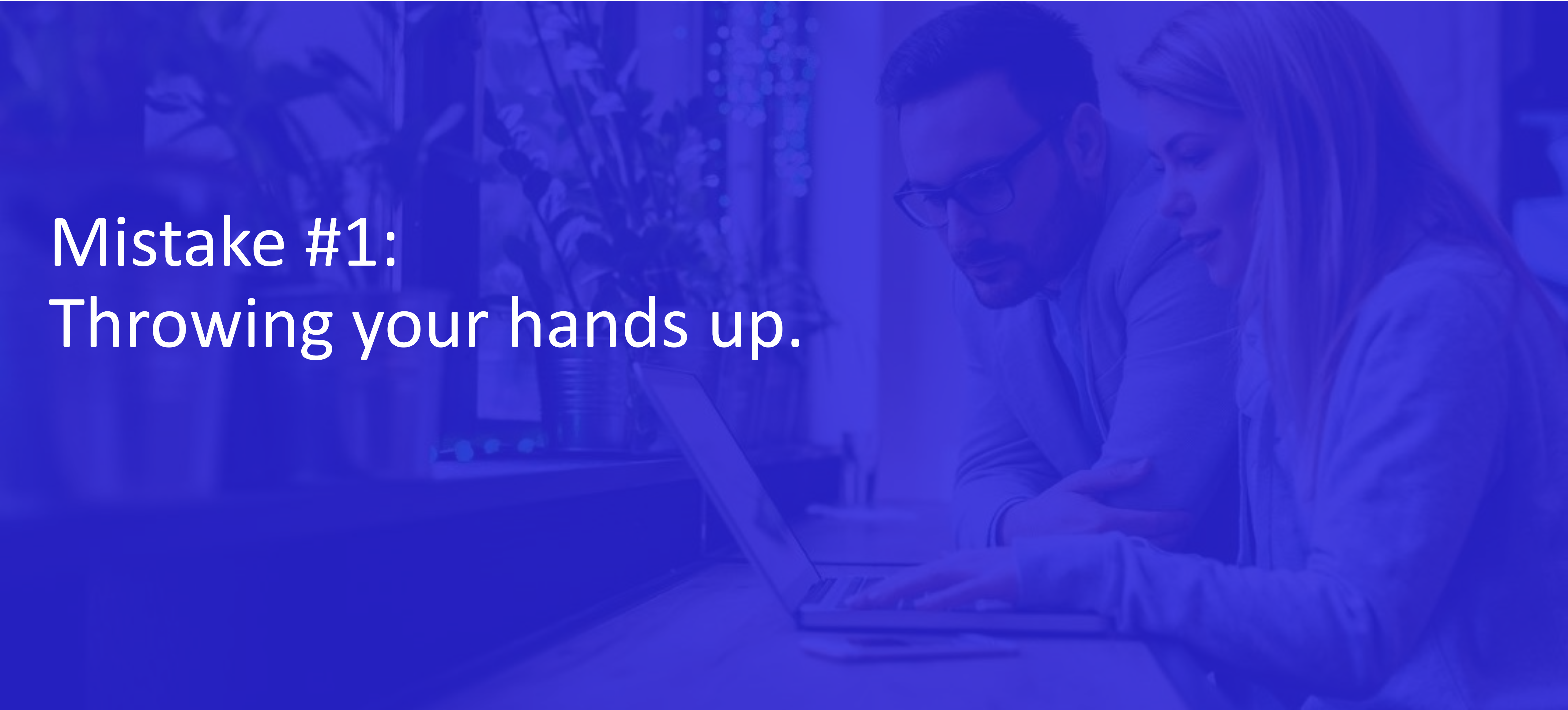
How you manage the business of IT within your city.

GOVERNANCE GETTING STARTED SHEET

Email: justin.stringer@vc3.com
Subject Line: “Governance”

I have made a terrible mistake

Mistake #1:
Throwing your hands up.



Mistake #1: Throwing Your Hands Up

You might be a non-technical municipal leader if…

WE’RE ALL FRIENDS HERE.

- You say “I know enough to be dangerous.”
- You use the word “guru” to describe an IT person.
- You still use the word “mainframe.”

You:

Run organizations with complex processes.

Solve complex problems for a living.

Are capable of setting objectives for technology.

Know your risks:

HOW DO YOU LOSE?

- Safety
- Operational
- Financial
- Reputational

Mistake #2:
Thinking products can resolve threats -
(a.k.a. no strategy)

Mistake #2: Thinking products can resolve threats.

WHAT’S THE DIFFERENCE?

- MIT Research, WSJ:

- *“Much of the problem, we believe, comes from managers seeing security as simply a matter of buying the right software, or tightening defenses, instead of taking steps to make safety a top priority for the whole company and strengthening the business so that it can withstand attacks and bounce back strongly.”*

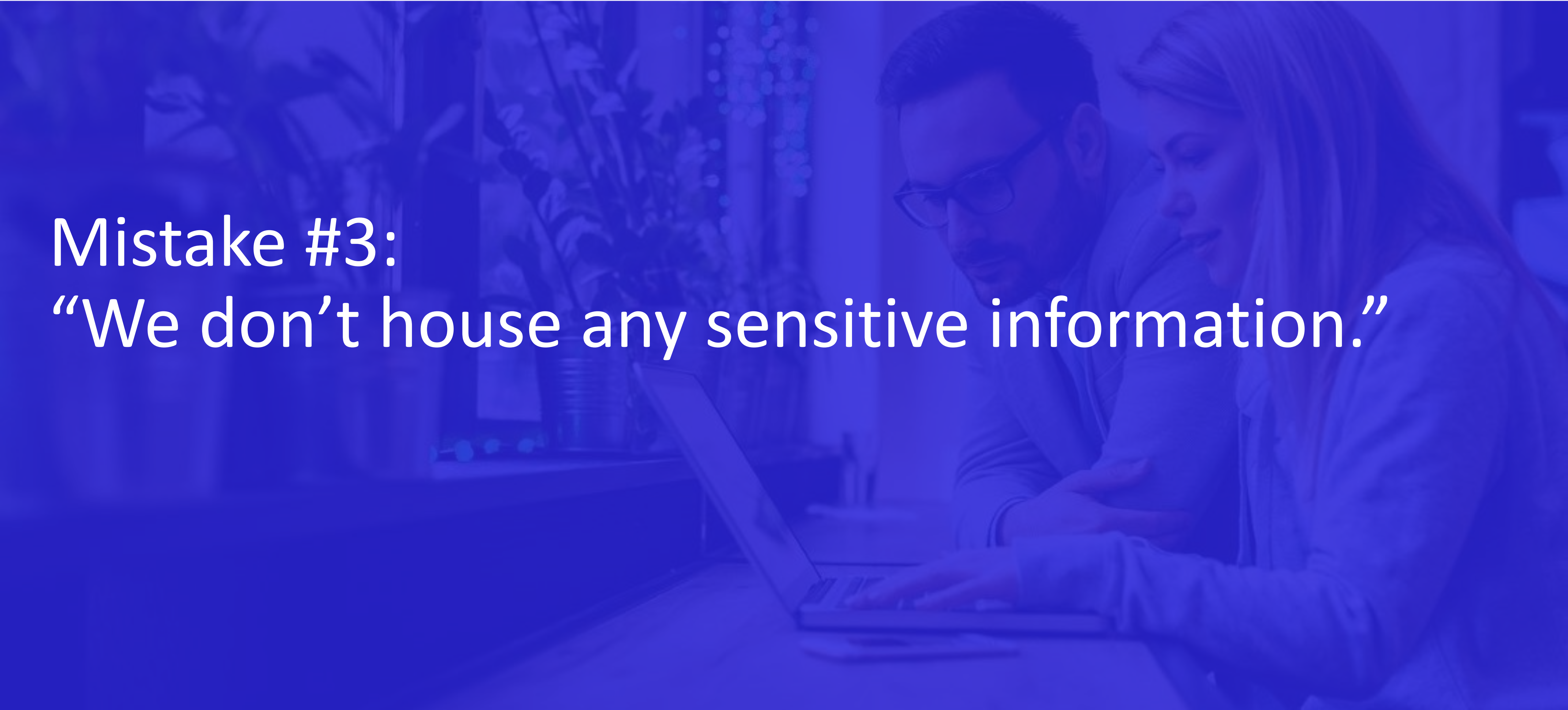
- Source: https://www.wsj.com/articles/company-mistakes-cybersecurity-11654279659

Capability	Description
Identify	What processes and assets need protection?
Protect	Implement appropriate safeguards to ensure protection of the enterprise’s assets
Detect	Implement appropriate mechanisms to identify the occurrence of cybersecurity incidents
Respond	Develop techniques to contain the impacts of cybersecurity events
Recover	Implement the appropriate processes to restore capabilities and services impaired due to cybersecurity events

Source: https://www.balbix.com/insights/nist-cybersecurity-framework/

FOCUS ON DETECTION!

Mistake #3:
“We don’t house any sensitive information.”



“It’s all public record.”

RETHINKING YOUR SENSITIVE DATA

HIPAA, PCI, CJIS

Employee information

HR Records

Utility systems

Access to other systems

Mistake #4:
Assuming IT is “handling” security.

What things need support?

SKILLS, STAFF, SECURITY, STRATEGY

- Technical
- Users
- Servers
- Switches
- Backup
- Firewalls/Switches/Routers
- On-prem Assets
- Cloud Services
- Apps
- PCs
- Mesh
- Software & Applications
- Security Tools, Monitoring, Management
- Patching & Maintenance
- IT Hygiene

- Administrative
- Warranties
- Licensing
- Security Strategy
- After-hours Support
- Finding new software and applications
- Hardware Refreshes
- System/Software Upgrades
- Reporting and Analysis
- Vendor Management
- Adopting new technologies

Security

EMBRACE THE SPECIALIST!

- Just like a cardiologist or neurologist, cybersecurity is a specialized discipline.
- Caveat: Cardiology doesn’t radically change every 18 months!
- Look for:
  - “Included”
  - “Taken care of”
  - “Baked in”

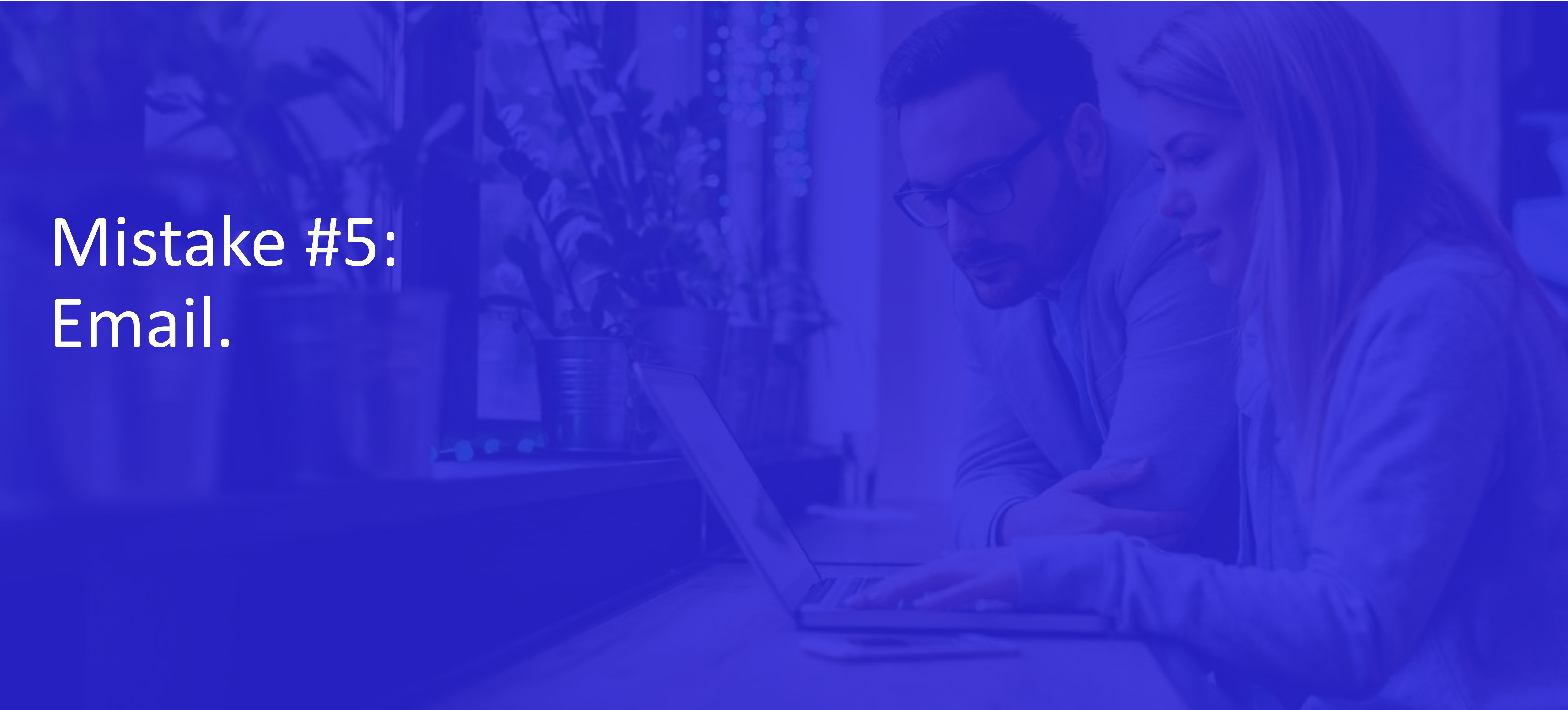
EMBRACE THE SPECIALIST.

Levels of Protection/Detection You Need:

NOT JUST A PIECE OF SOFTWARE:

- Workstation
- Email
- Cloud Applications (i.e. Microsoft 365)
- Web Protection (Content, HTTPS Attacks)
- Network Layer
- Backups
- Policies and Procedures
- Dark Web Monitoring

“Trust but verify.”



Mistake #5: Email.

Email is your biggest vulnerability

IT’S TIME TO GET SERIOUS ABOUT IT

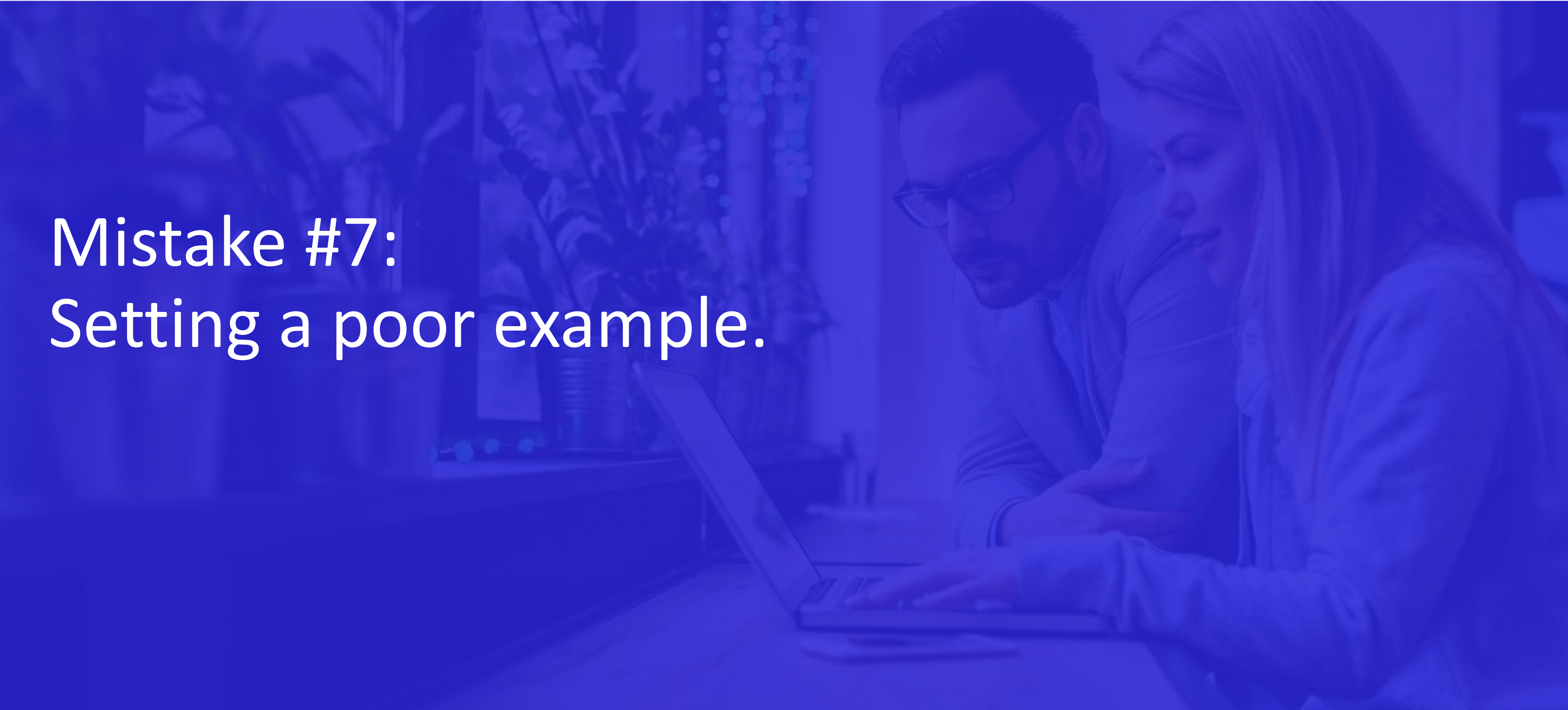
- Clicking Links
- Social Engineering
- Compromised Credentials
- Deferring upgrades on woefully outdated servers
- On-Prem Exchange
- Leaked Sensitive Data
- Consumer Products for Government Use
- No detection capabilities
- No centralized management of users
- GoDaddy
- Not on Government Cloud

Mistake #6:
No accountability or clear objectives for IT.

What does “GOOD” look like?

PROVIDE HELPFUL ACCOUNTABILITY

- Step 1: Adopt a Framework
- Step 2: Know your risks
- Step 3: Build a strategy
- Step 4: Adopt a “risk-based approach” to IT Budget planning
- Step 5: Provide accountability and optimize



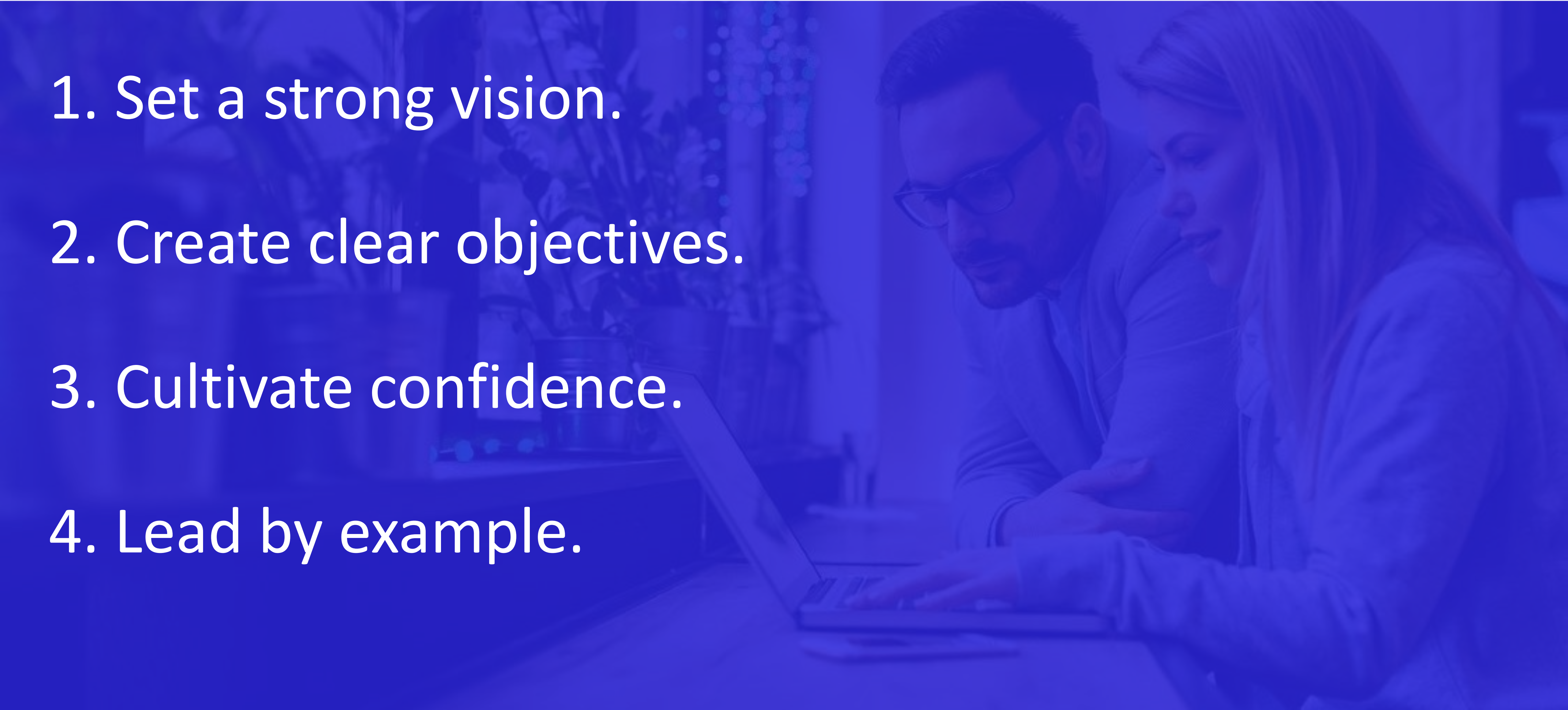
Mistake #7:
Setting a poor example.

Lead By Example

SET A STRONG VISION

- Do you defer maintenance?
- Do you treat IT as an asset?
- Is “good enough” good enough?

HOW TO LEAD IT WHEN YOU'RE NONTECHNICAL:



1. Set a strong vision.

2. Create clear objectives.

3. Cultivate confidence.

4. Lead by example.