

ELIZABETH WEATHERS & SAVANNAH RICHARDSON

Deepfakes and the Future of Security Awareness



1

DISCLAIMER

- **This presentation is for information only.**
Evaluate risks before acting based on ideas from this presentation.
- **This presentation contains the presenters' opinions.**
Opinions may not reflect the opinions of Tandem.
- **This presentation is proprietary.**
Unauthorized release of this information is prohibited.
Original material is Copyright © 2026 Tandem, LLC.



2



Elizabeth Weathers

Support Specialist
Tandem



Savannah Richardson

GRC Content Analyst
Tandem



3

SESSION AGENDA

- 1** Defining Deepfakes
- 2** The Human Factor
- 3** Detection Essentials
- 4** Building Resilience Through Awareness



4

What is a Deepfake?



5

WHAT IS A DEEPPFAKE?

Description

A deepfake is a piece of audio, video, or image content that has been altered using artificial intelligence to appear real even though it's completely fake.

Types of Deepfakes

- Audio
- Video
- Image



6

Q: How long have deepfakes been around?

A: A lot longer than you think!

 KEYS

7



 KEYS

8



How a 19th-Century portrait of Abraham Lincoln was later revealed to be a fake



How They Appear



HOW THEY APPEAR



Believable
Impersonation



Trust, Urgency,
Authority



Fraud, Impersonation,
Identity Creation

<https://coverlink.com/case-study/case-study-25-million-deepfake-scam/>



11

TYPES OF DEEPAKES



Voice
Cloning



Video
Manipulation



Synthetic
Identities



Chat Generated
Impersonation

Sources: KnowBe4 Blog, KrebsOnSecurity, Salesforce



12

How Deepfakes Are Made



13

The Human Factor



14

WHY ARE DEEPFAKES SO CONVINCING?



Feels Real



Feels Familiar



Feels Urgent

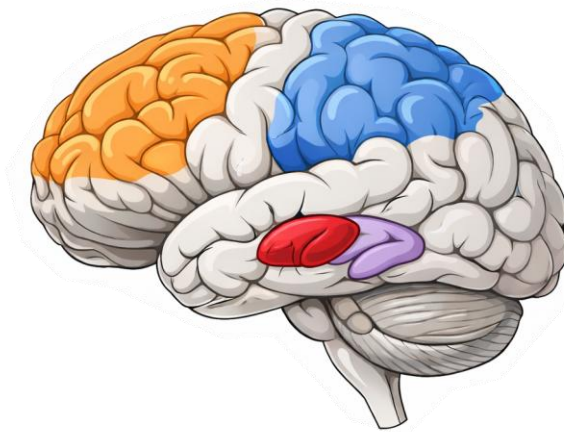


Feels Overwhelming



15

WHY ARE DEEPFAKES SO CONVINCING?



16

FEELS REAL | TRUST BIAS



PREFRONTAL CORTEX

The Neuroscience of Trust

Deepfakes take advantage by giving our brains just enough believable cues to trigger trust automatically.



17

FEELS FAMILIAR | FAMILIARITY EFFECT



HIPPOCAMPUS

Neural mechanisms of face familiarity and learning in the human amygdala and hippocampus

That's why deepfakes don't need to look perfect, they just need to feel familiar enough for our brains to lower their guard.



18

FEELS URGENT | EMOTIONAL MANIPULATION



That's why urgent deepfake requests are so effective. When emotion is high, logic is low and verification feels like something we don't have time for.

AMYGDALA

Amygdala Hijack: When Emotion Takes Over



19

FEELS OVERWHELMING | COGNITIVE OVERLOAD




When cognitive overload is high, reacting feels easier than verifying.

PREFRONTAL & PARIETAL CORTEX

What is Cognitive Load and How to Manage it?




20




KEY TAKEAWAY


Awareness gives us permission to slow down, verify, and ask questions.

 **KEYS**

21







Detection Essentials

 **KEYS**

22

TYPES OF CUES

		
Visual Cues	Audio Cues	Behavioral Cues



23

VISUAL CUES | 5 B'S

1	2	3	4	5
Blurry	Blinking	Blocking	Bumpy	Balanced





24

AUDIO CUES | 5 S'S



1

Sync



2

Stop



3

Sound



4

Static



5

Strange




25

BEHAVIORAL CUES | 4 U'S



1

Urgent

- 1 Artificial Deadline
- 2 False Scarcity
- 3 Secrecy
- 4 Limited Interaction Window
- 5 Escalating Threat
- 6 Emotional Pressure
- 7 Fake Technical Constraints
- 8 Repetition



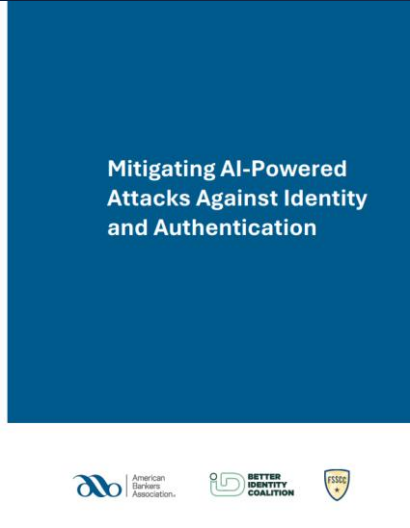





26

BEHAVIORAL CUES | 4 U'S

			
1	2	3	4
Urgent	Unusual	Unfamiliar	Underhanded



27

 <p>Mitigating AI-Powered Attacks Against Identity and Authentication</p> <p>  </p>	<p>Passive Liveness</p> <p>vs</p> <p>Active Liveness</p> <p></p>
--	---

<https://fsscc.org/wp-content/uploads/2026/02/AI-IA-Workstream-Mitigations.pdf>

28

IS THIS A DEEFAKE?

DON'T ASK



"Is this a deepfake?"

DO ASK




"What risk does this create?"




29


QUESTIONS TO ASK

- 1 What story is this telling?
- 2 What action is being requested?
- 3 Is urgency overriding process?
- 4 Who benefits if I comply?
- 5 Have I verified through a trusted channel?






30



KEY TAKEAWAY

Pause when requests feel urgent.
Verify before you act.



31




Building Resilience Through Awareness



32



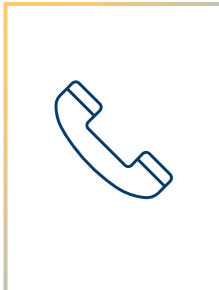
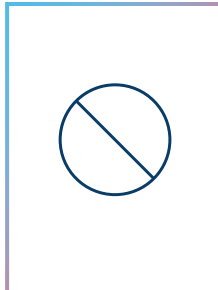
AWARENESS


- ▶ Realistic Scenarios
- ▶ Process Reinforcement
- ▶ Emotional Awareness
- ▶ Cross-Department Inclusion



33


VERIFICATION

			
Pause & Verify	Trusted Channels	Call Back	No Exceptions



34

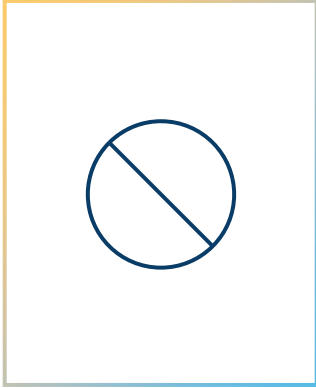
REPORTING




Alert Team



Provide Evidence



Avoid Forwarding



35

CULTURE


Awareness

+

Verification

+

Reporting



36

A strong security culture
supports employees
who follow process.



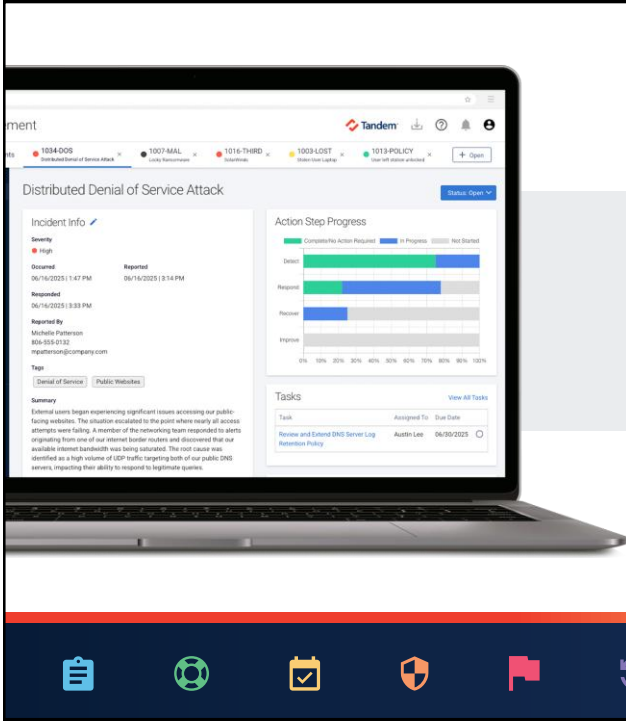
37

KEY TAKEAWAY

Deepfake resilience is built on
awareness, verification, reporting,
and a culture that supports them.

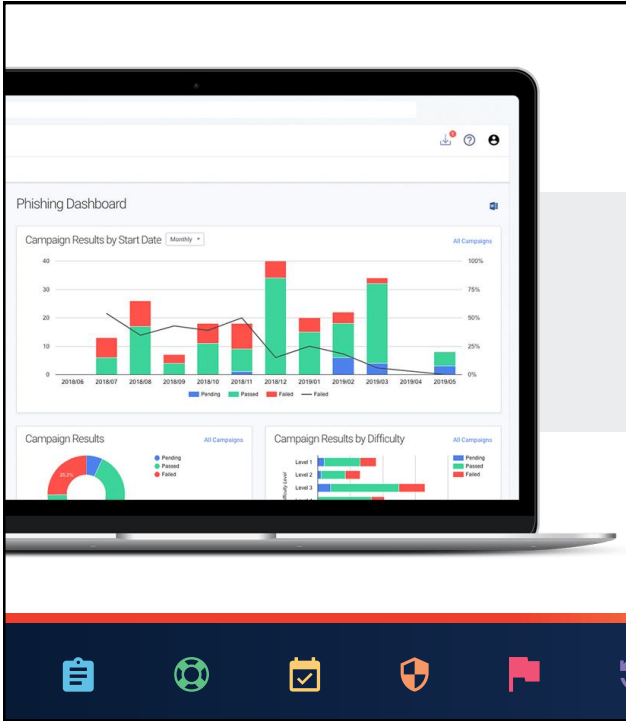


38



Tandem Incident Management Software

39



Tandem Phishing Software

40

SESSION RECAP

- 1 Defining Deepfakes
- 2 The Human Factor
- 3 Detection Essentials
- 4 Building Resilience Through Awareness



41



42

Fill out the survey to get your sticker!







43

Thank You!

CONNECT WITH OUR SPEAKERS AT [TANDEM.APP/KEYS](https://tandem.app/keys)





44