LEVEL UP

Leticia Saiid

How to Leverage the Learning Process in Your Security Awareness Training

Cybersecurity

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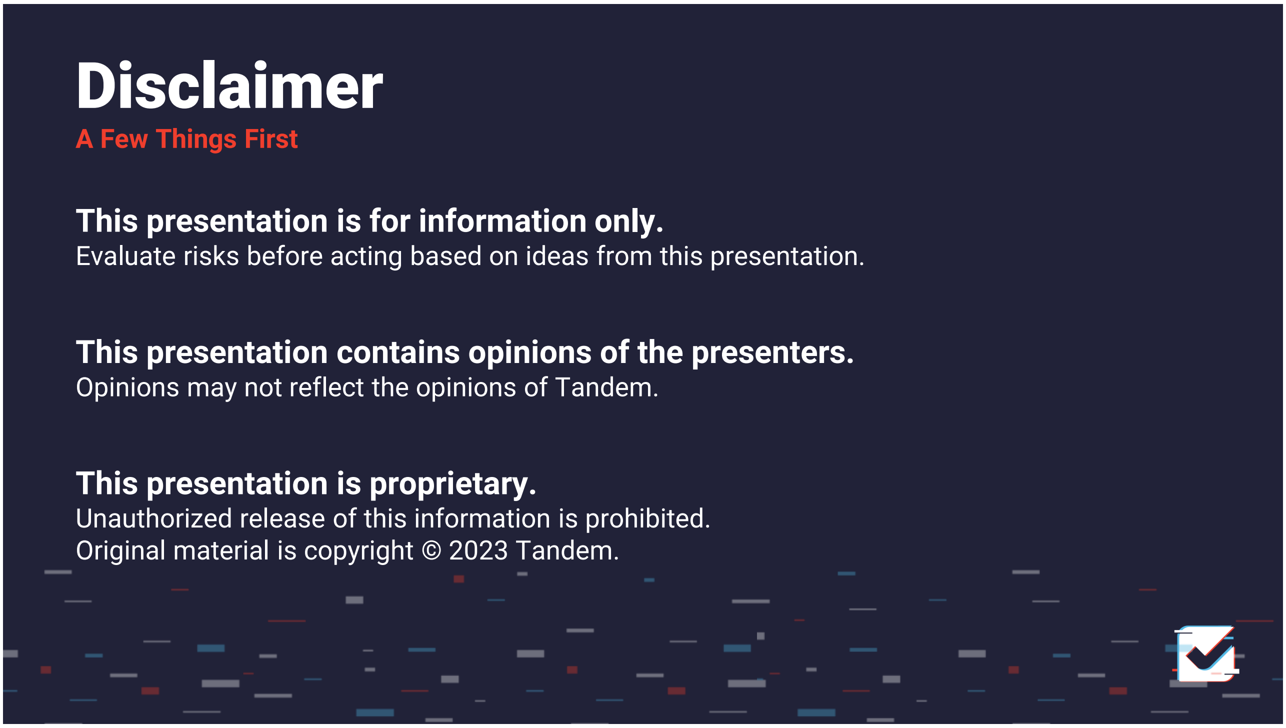

Disclaimer

A Few Things First

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Evaluate risks before acting based on ideas from this presentation.

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Leticia (Letice) Saiid

Security+

Chief of Staff & Chief Learning Officer

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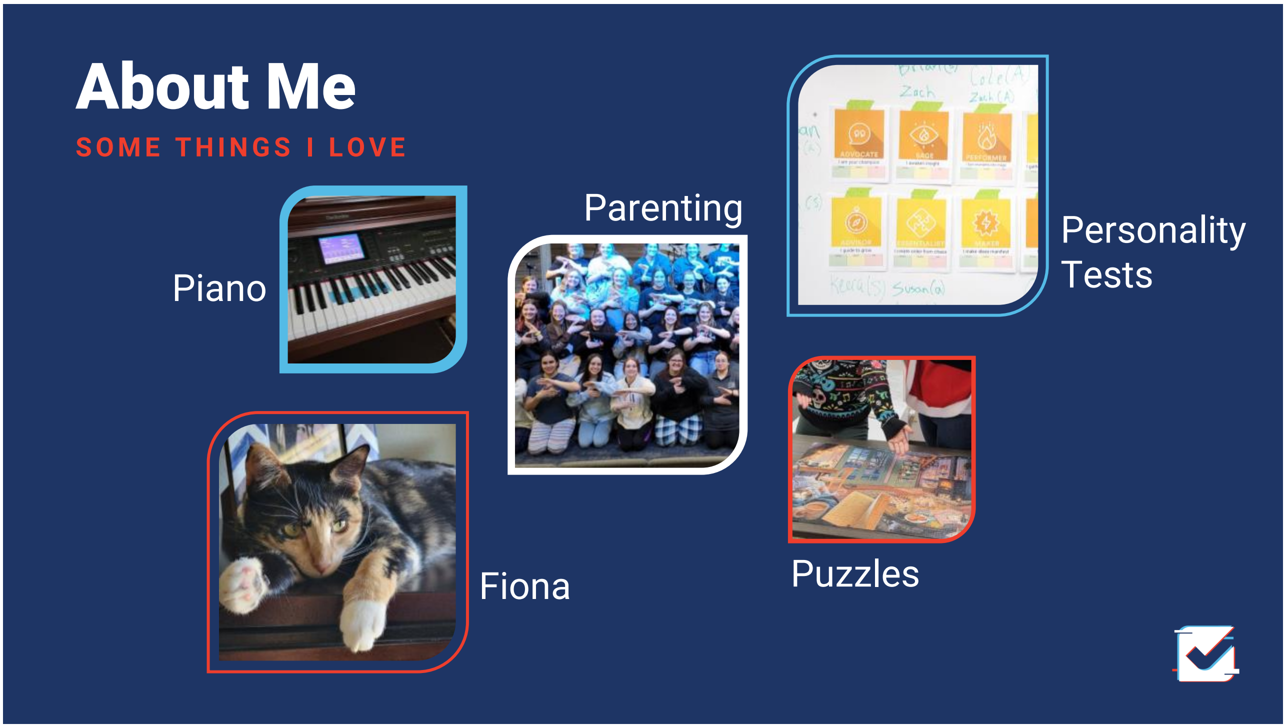

About Me

SOME THINGS I LOVE

Piano

Parenting

Personality Tests

Fiona

Puzzles

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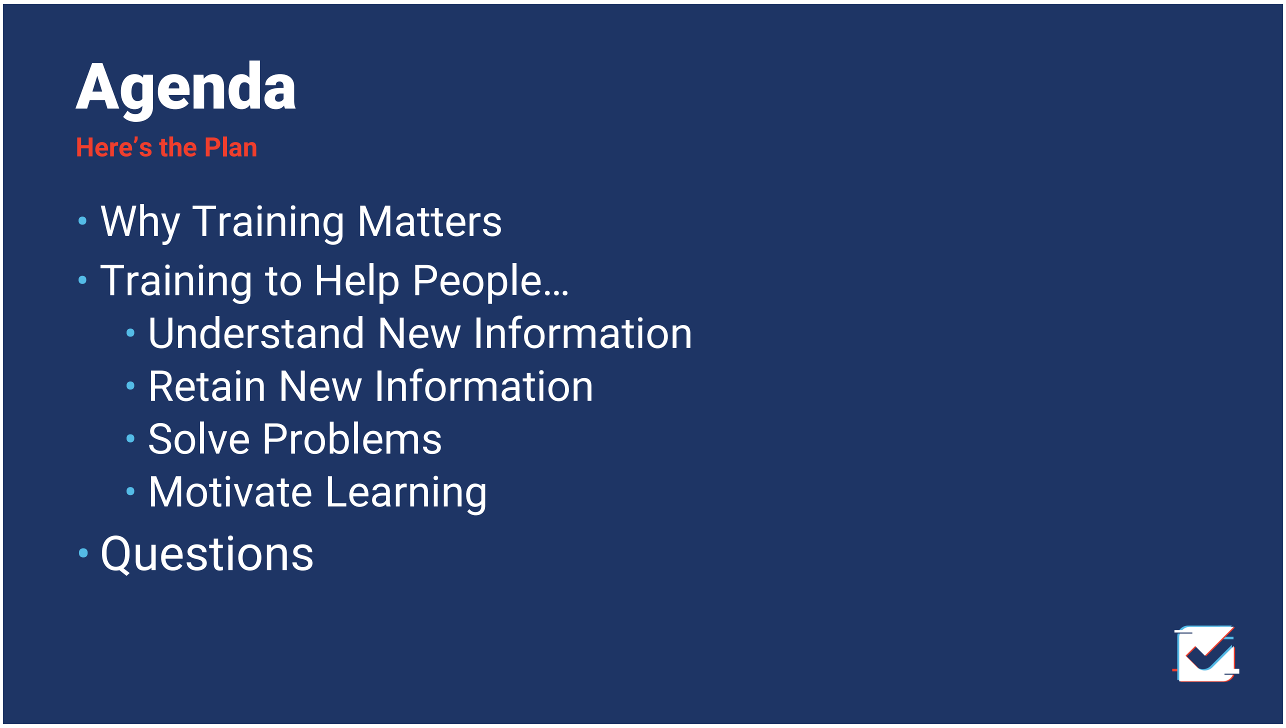
How involved are **YOU** in security awareness training?

5



Agenda

Here's the Plan

- Why Training Matters
- Training to Help People…
  - Understand New Information
  - Retain New Information
  - Solve Problems
  - Motivate Learning
- Questions

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Why Training Matters

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Sticky

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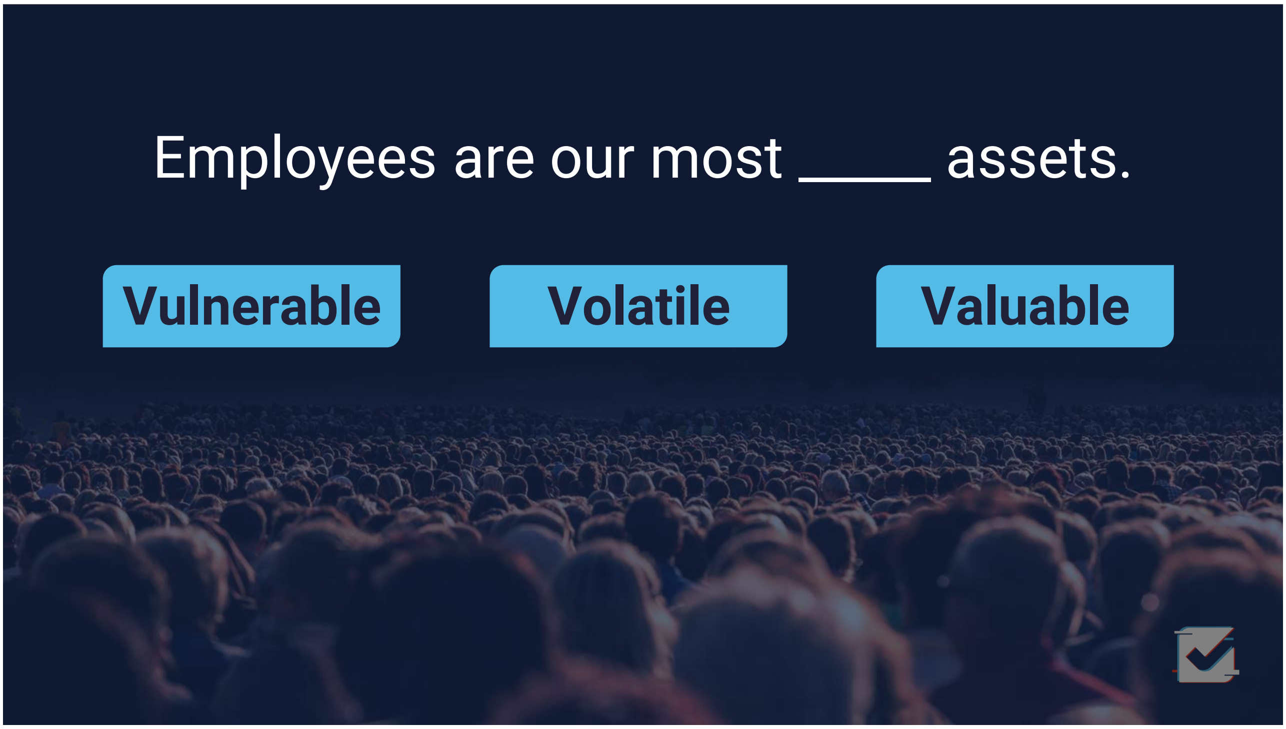

Employees are our most _____ assets.

Vulnerable

Volatile

Valuable

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Training Methods

Live Classroom Training

Informative / Educational Emails

Phishing Tests

Video/Online Training

One-on-One Training

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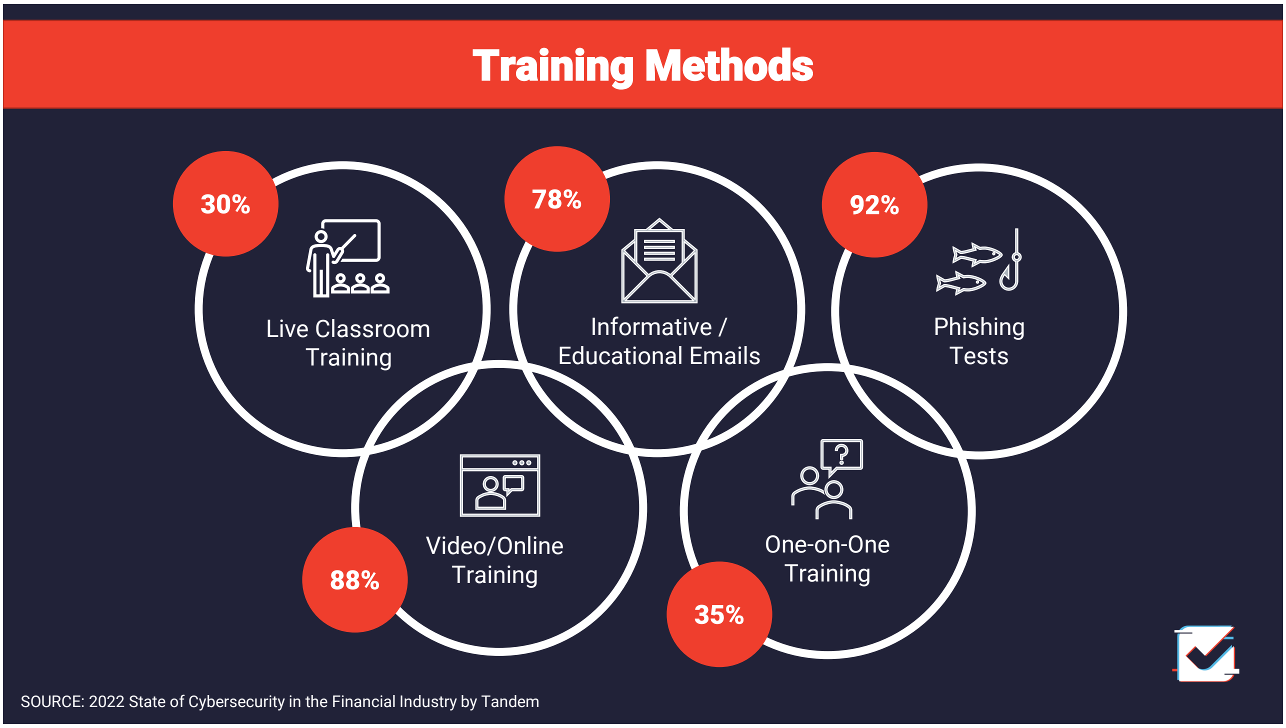

Training Methods

30% Live Classroom Training

78% Informative / Educational Emails

92% Phishing Tests

88% Video/Online Training

35% One-on-One Training

SOURCE: 2022 State of Cybersecurity in the Financial Industry by Tandem

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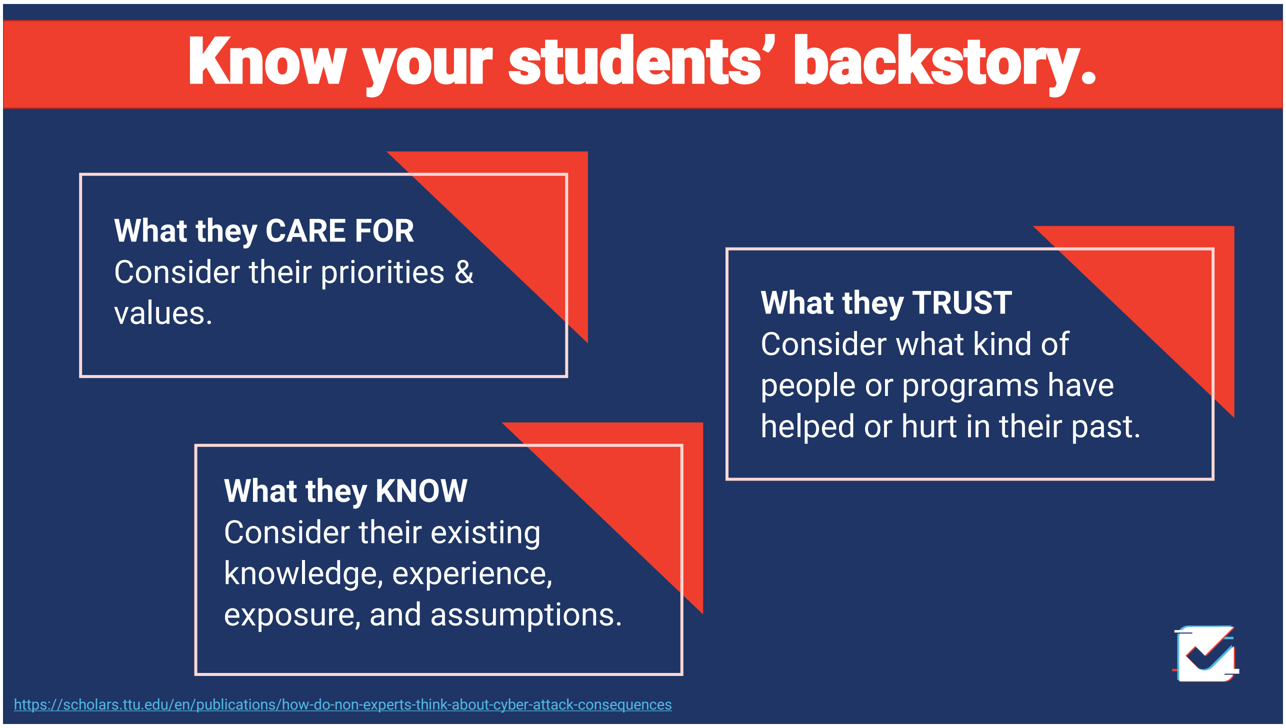

Know your students' backstory.

What they CARE FOR
Consider their priorities & values.

What they TRUST
Consider what kind of people or programs have helped or hurt in their past.

What they KNOW
Consider their existing knowledge, experience, exposure, and assumptions.

https://scholars.ttu.edu/en/publications/how-do-non-experts-think-about-cyber-attack-consequences

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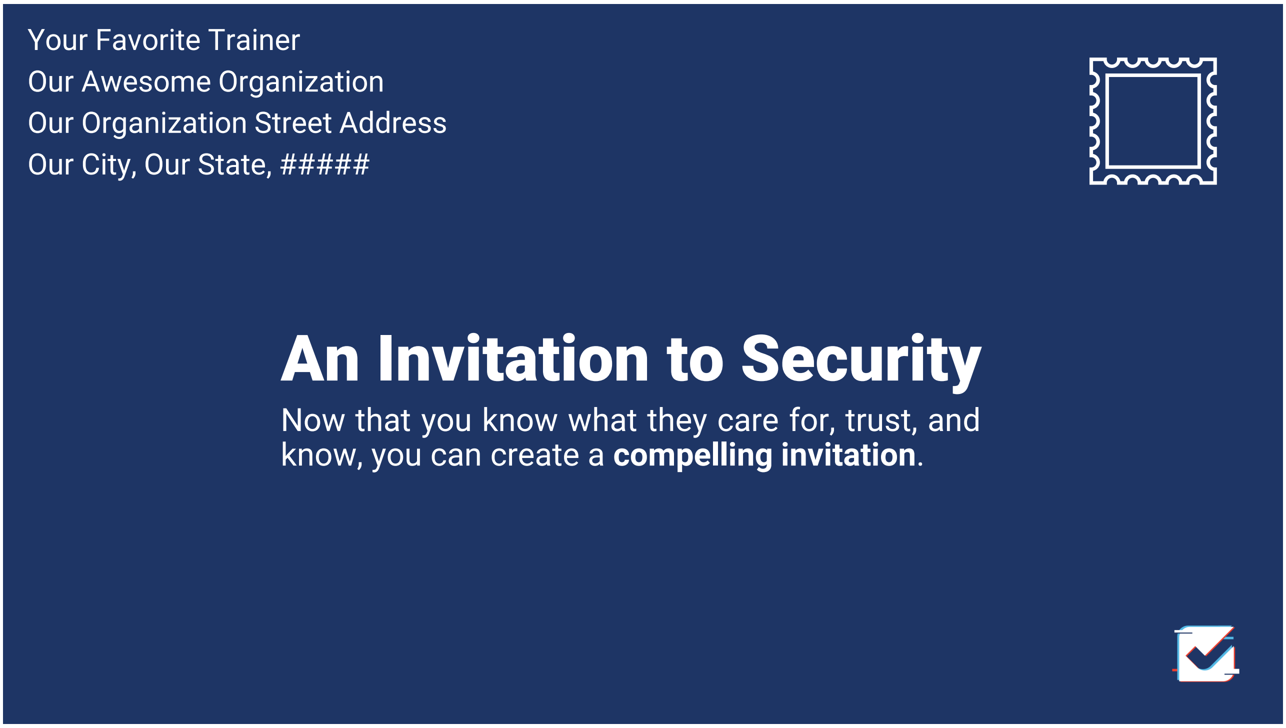

Your Favorite Trainer
Our Awesome Organization
Our Organization Street Address
Our City, Our State, #####

An Invitation to Security

Now that you know what they care for, trust, and know, you can create a **compelling invitation**.

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[ ] ? !

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DEANS FOR IMPACT

THE SCIENCE OF LEARNING

www.deansfo

THE SCIENCE OF LEARNING

DEANS FOR IMPACT

1 HOW DO STUDENTS UNDERSTAND NEW IDEAS?

COGNITIVE PRINCIPLES

PRACTICAL IMPLICATIONS FOR THE CLASSROOM

Students learn new ideas by reference to ideas they already know.

To learn, students must transfer information from working memory (where it is consciously processed) to long-term memory (where it can be stored and later retrieved). Students have limited working memory capacities that can be overwhelmed by tasks that are cognitively too demanding. Understanding new ideas can be impeded if students are confronted with too much information at once.

Cognitive development does not progress through a fixed sequence of age-related stages. The mastery of new concepts happens in fits and starts.

[illegible]

Science of Learning

https://deansforimpact.org/resources/the-science-of-learning/

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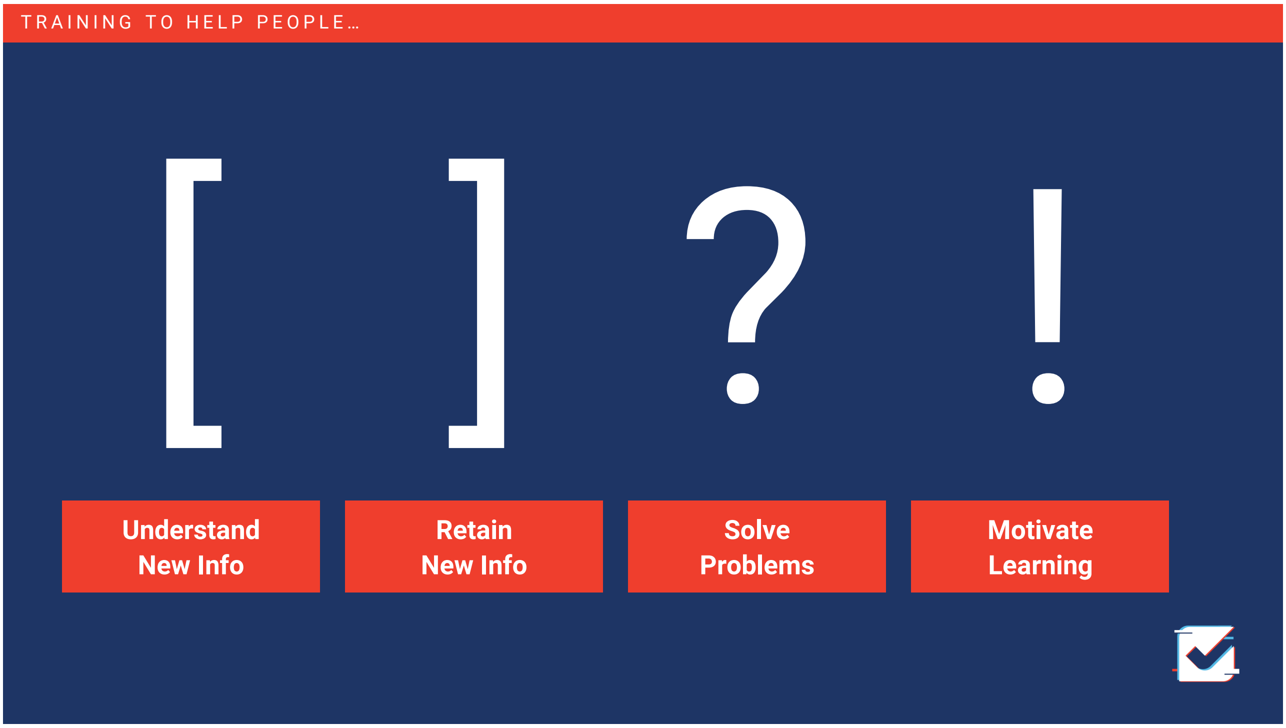

TRAINING TO HELP PEOPLE…

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Understand New Info

Retain New Info

Solve Problems

Motivate Learning

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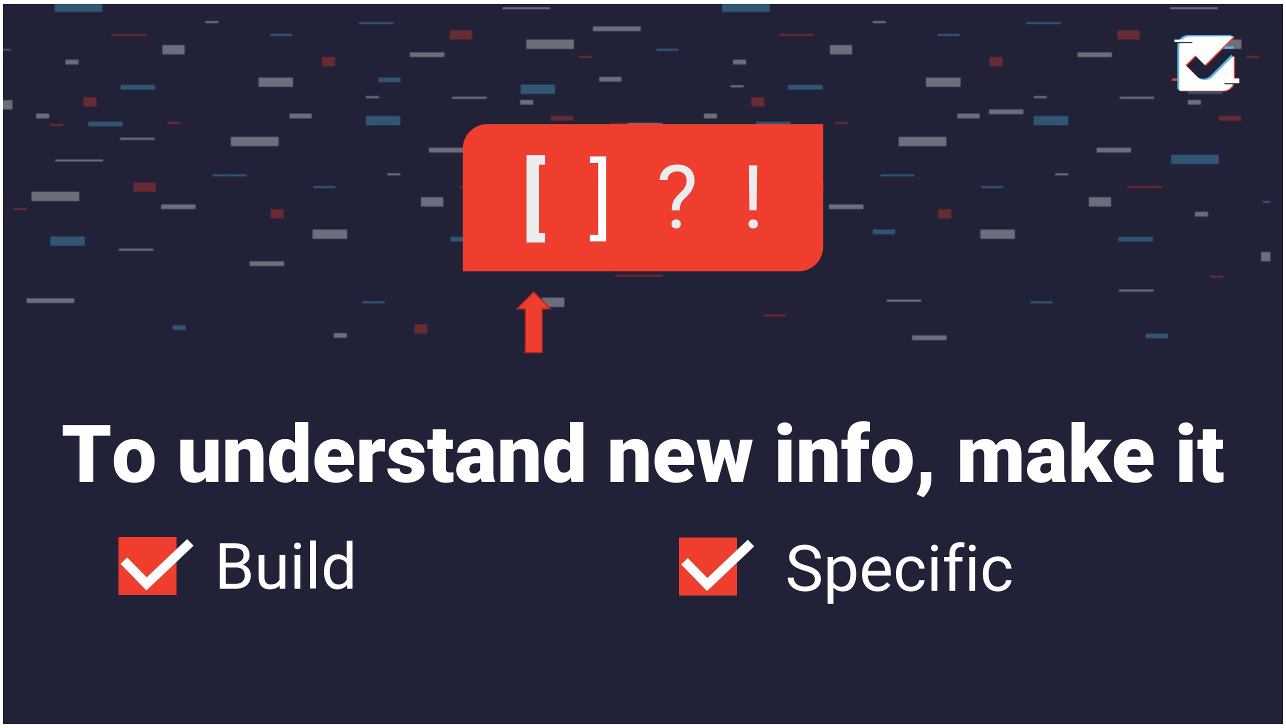

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To understand new info, make it

☑ Build

☑ Specific

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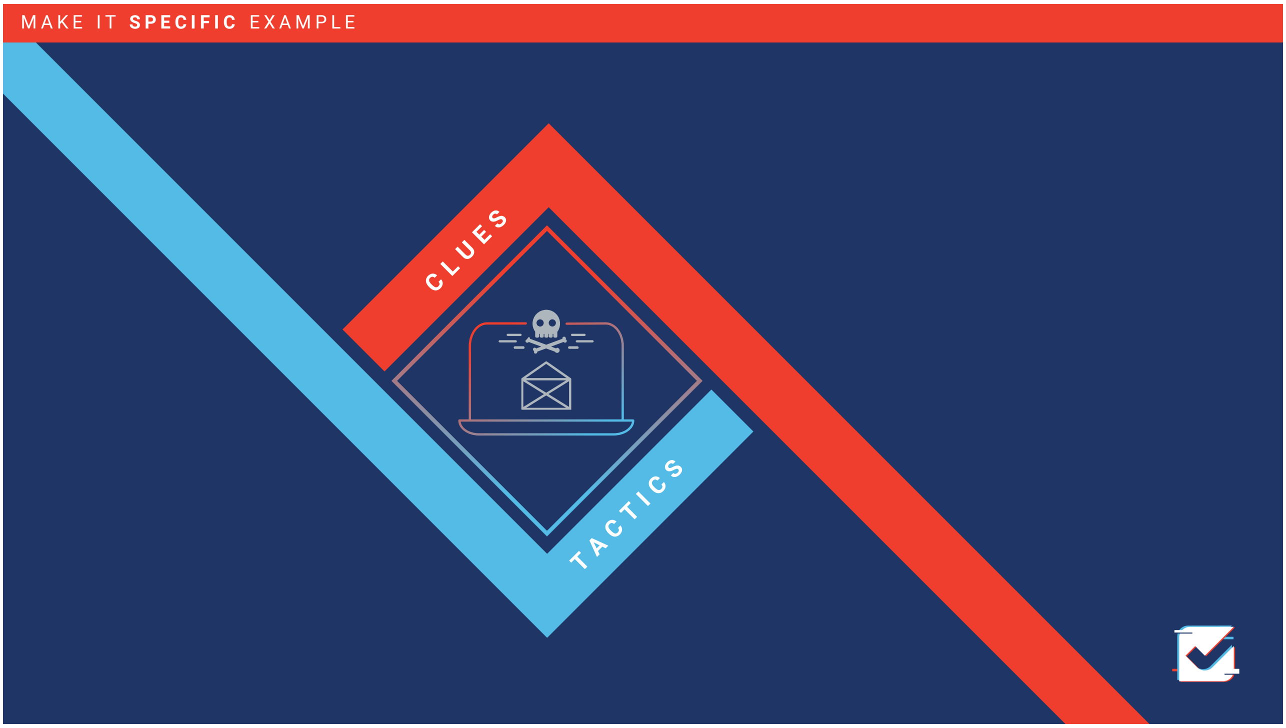
MAKE IT **SPECIFIC** EXAMPLE



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MAKE IT **SPECIFIC** EXAMPLE

When You Receive an Email...

BEWARE OF TACTICS

- Loss
- Reciprocation
- Urgency
- Authority
- Familiarity
- Popularity

CHECK FOR CLUES

- Links and Attachments
- Unfamiliar Sender
- Unexpected Email
- Errors
- Familiar, yet Unusual
- Personal Topics

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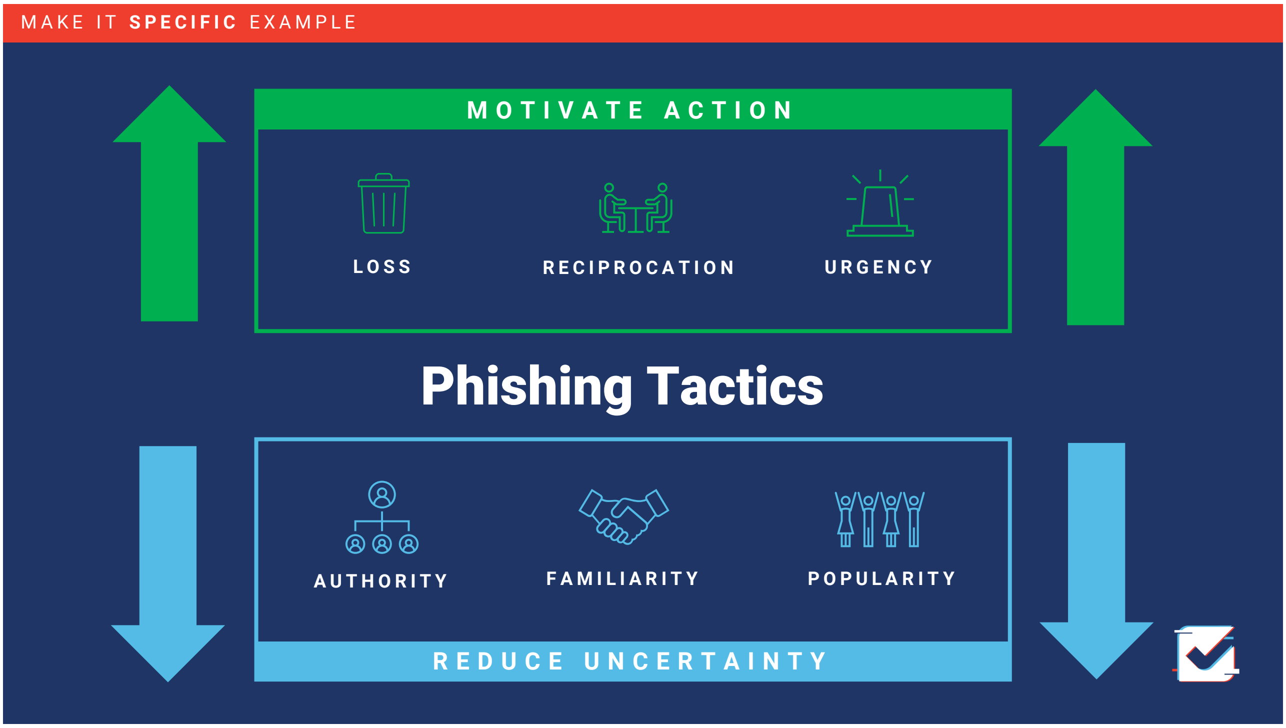

MAKE IT **SPECIFIC** EXAMPLE

MOTIVATE ACTION

LOSS

RECIPROCATION

URGENCY

Phishing Tactics

AUTHORITY

FAMILIARITY

POPULARITY

REDUCE UNCERTAINTY

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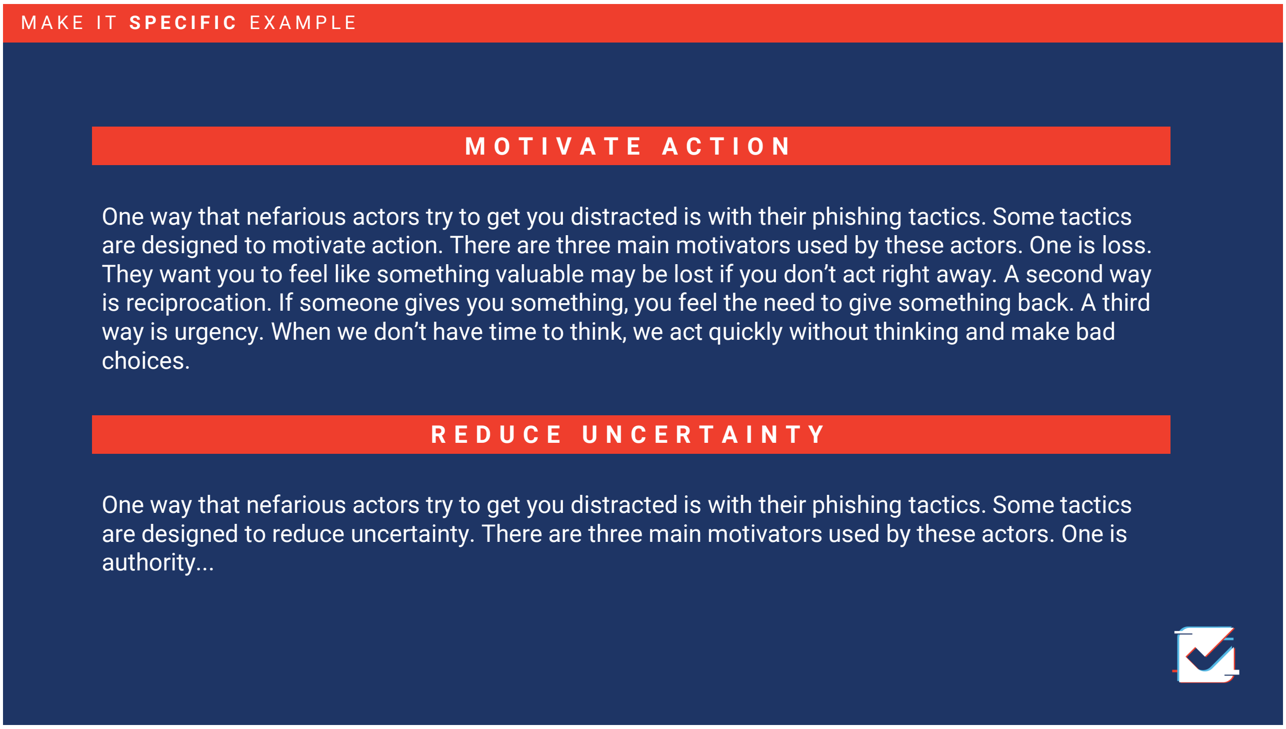

MAKE IT **SPECIFIC** EXAMPLE

MOTIVATE ACTION

One way that nefarious actors try to get you distracted is with their phishing tactics. Some tactics are designed to motivate action. There are three main motivators used by these actors. One is loss. They want you to feel like something valuable may be lost if you don't act right away. A second way is reciprocation. If someone gives you something, you feel the need to give something back. A third way is urgency. When we don't have time to think, we act quickly without thinking and make bad choices.

REDUCE UNCERTAINTY

One way that nefarious actors try to get you distracted is with their phishing tactics. Some tactics are designed to reduce uncertainty. There are three main motivators used by these actors. One is authority...

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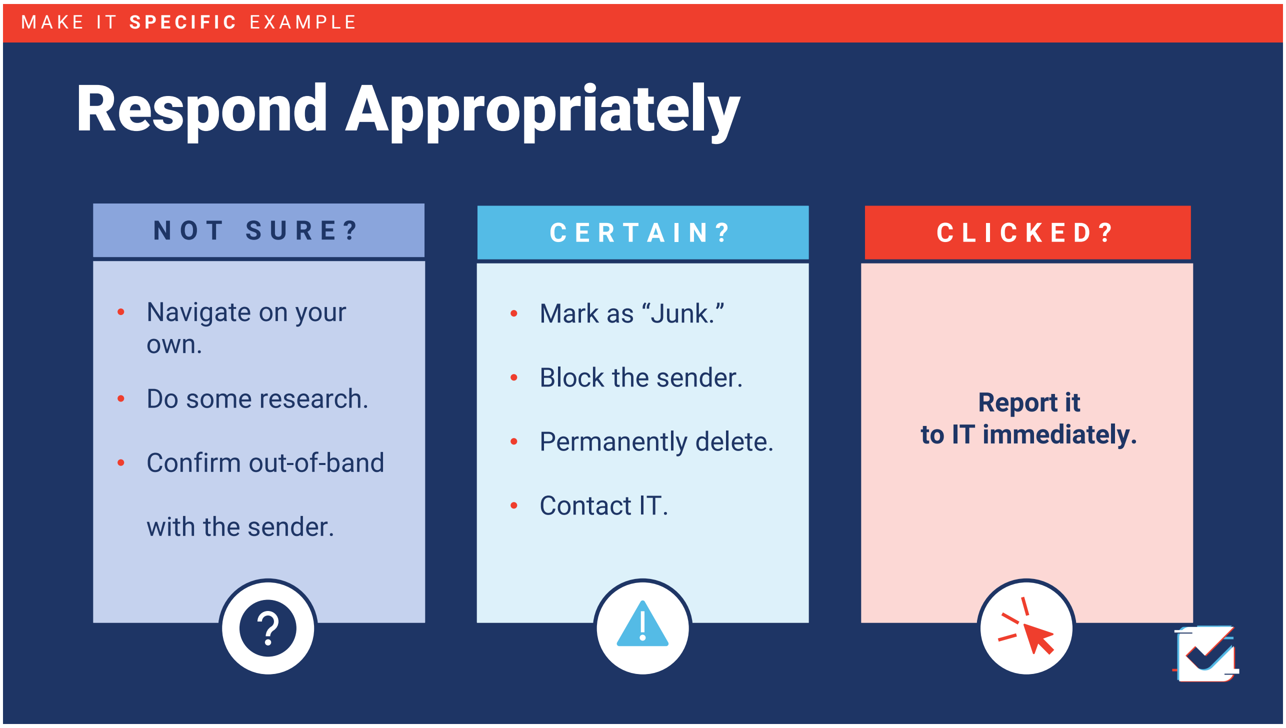

MAKE IT **SPECIFIC** EXAMPLE

Respond Appropriately

NOT SURE?

- Navigate on your own.
- Do some research.
- Confirm out-of-band with the sender.

CERTAIN?

- Mark as “Junk.”
- Block the sender.
- Permanently delete.
- Contact IT.

CLICKED?

Report it to IT immediately.

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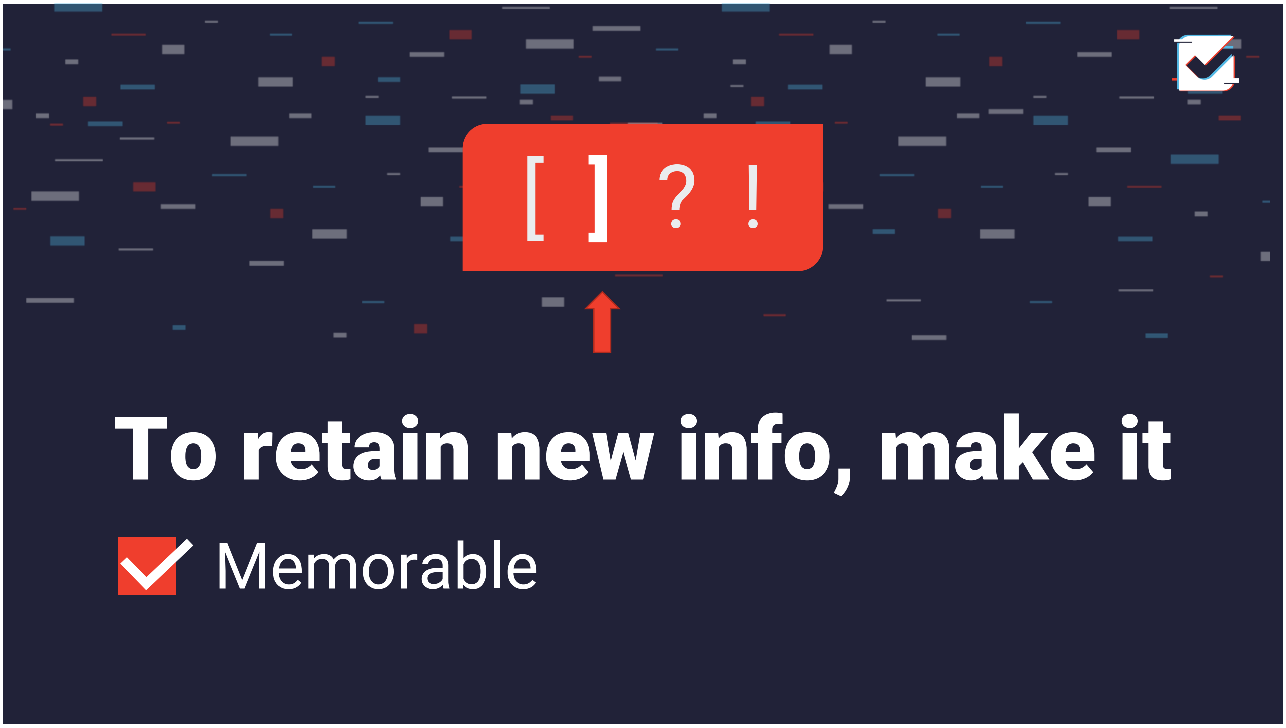

[ ] ? !

To retain new info, make it

☑ Memorable

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MAKE IT **MEMORABLE** EXAMPLE

Always "paws" before clicking a link in an email.

How to catch a phisher:

Clues

And

Tactics

Can

Help

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MAKE IT **MEMORABLE** EXAMPLE

The phishing messages that trick us are not the most legitimate looking, they are the most emotion inducing.

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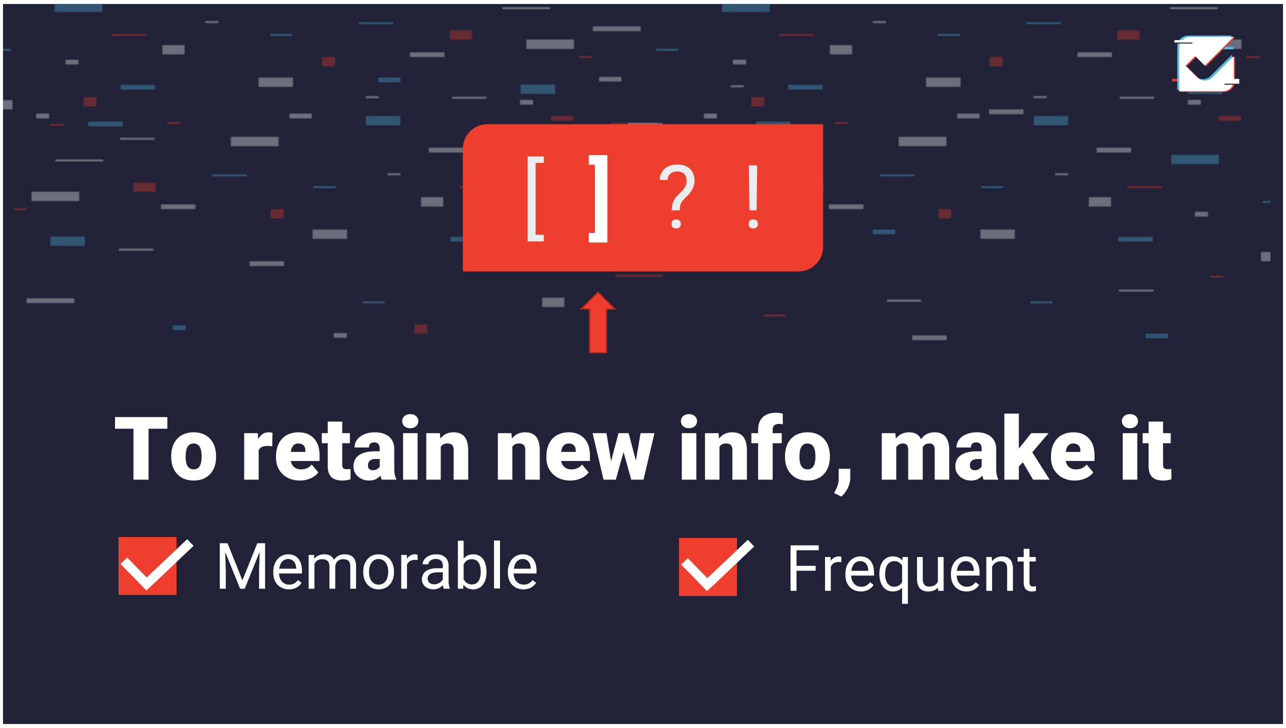

To retain new info, make it

☑ Memorable ☑ Frequent

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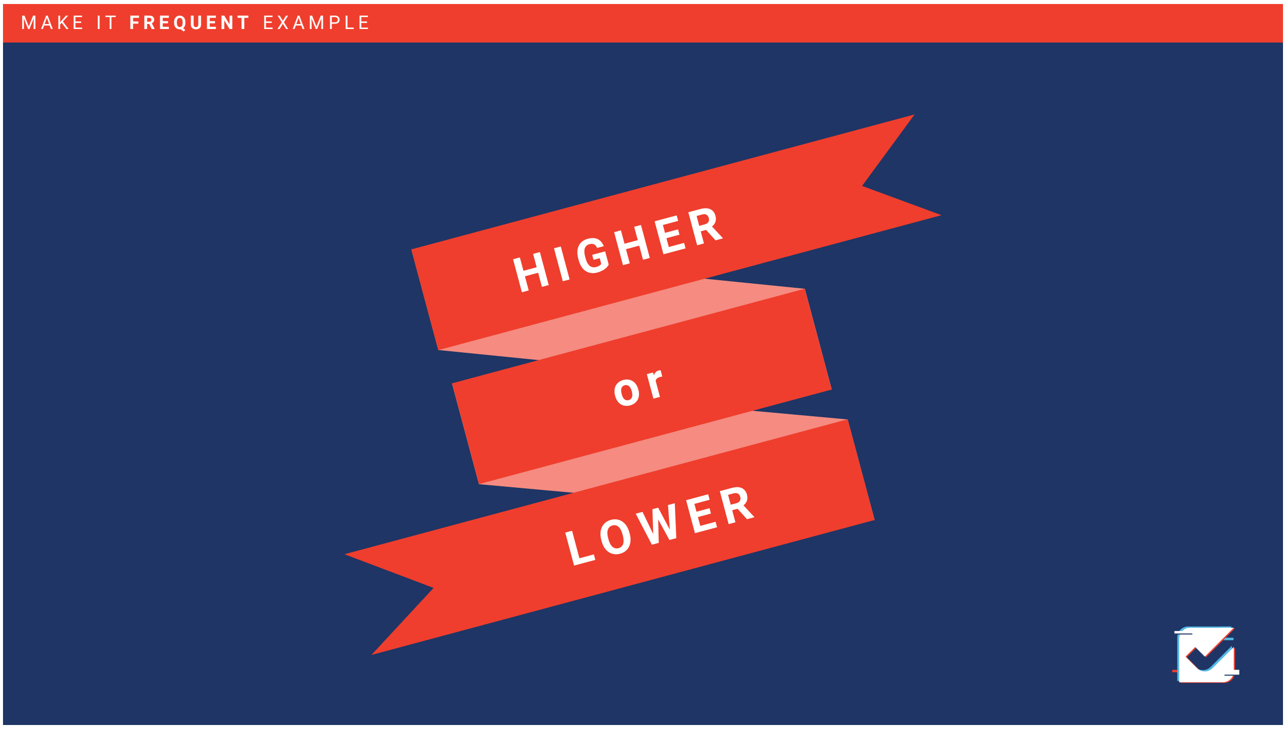
MAKE IT **FREQUENT** EXAMPLE

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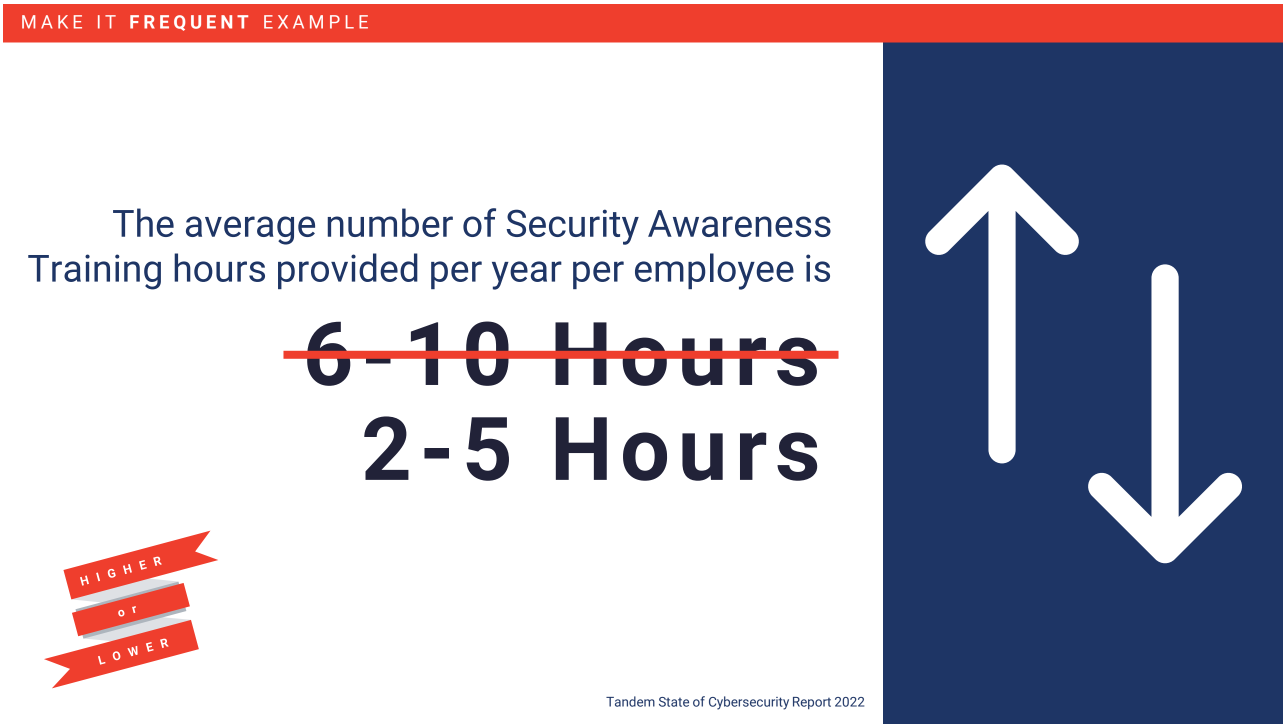

MAKE IT **FREQUENT** EXAMPLE

The average number of Security Awareness Training hours provided per year per employee is

~~6-10 Hours~~

2-5 Hours

HIGHER
or
LOWER

Tandem State of Cybersecurity Report 2022

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To solve problems, make it

✓ Automatic

✓ Measured

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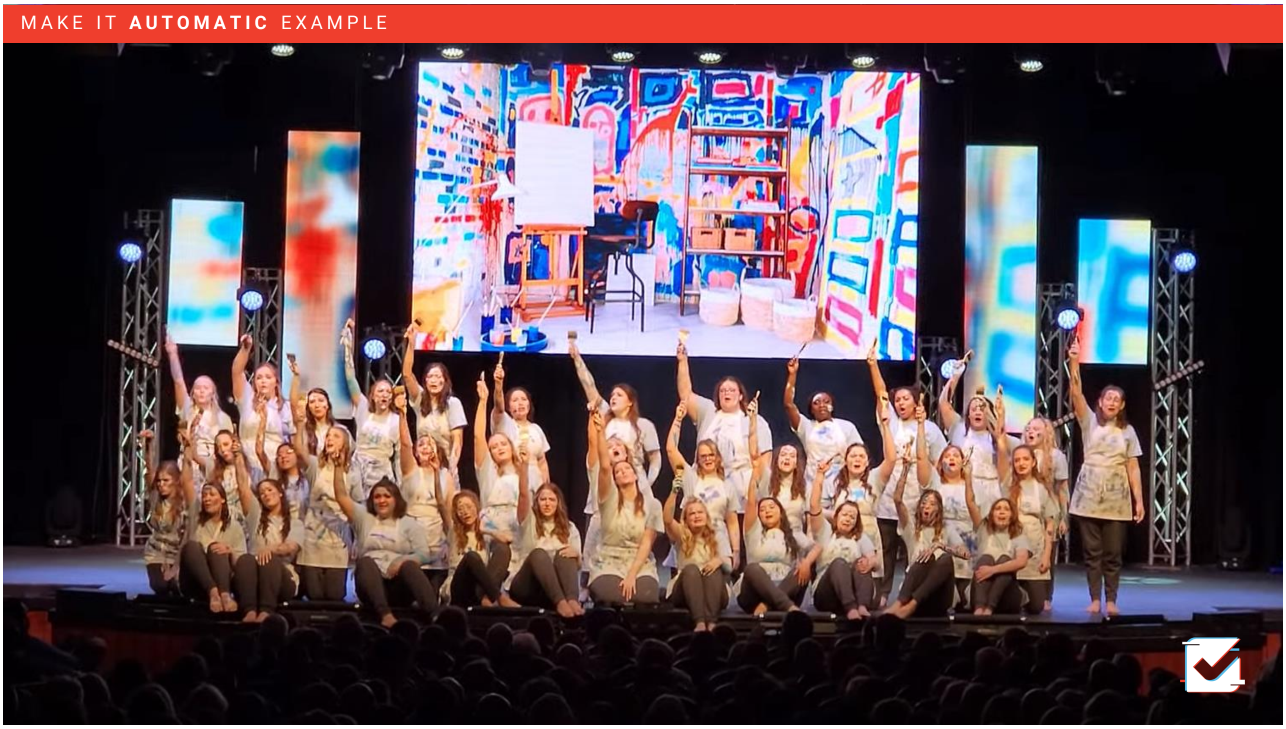
MAKE IT **AUTOMATIC** EXAMPLE



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MAKE IT **MEASURED** EXAMPLE

From: John Doe <jdoe@KEYSconfrence.com>
Sent: Tuesday, April 4, 2023 8:00 AM
To: Leticia Saiid <lsaiid@conetrix.com>
Subject: FWD: From KEYS Conference

Hello valued member,

I hope you are as excited for the event as I am.

Here is a copy of your event registration… Pls review & fill out attached form BEFORE 12:00 TODAY.

Reg04_04.html (7KB)

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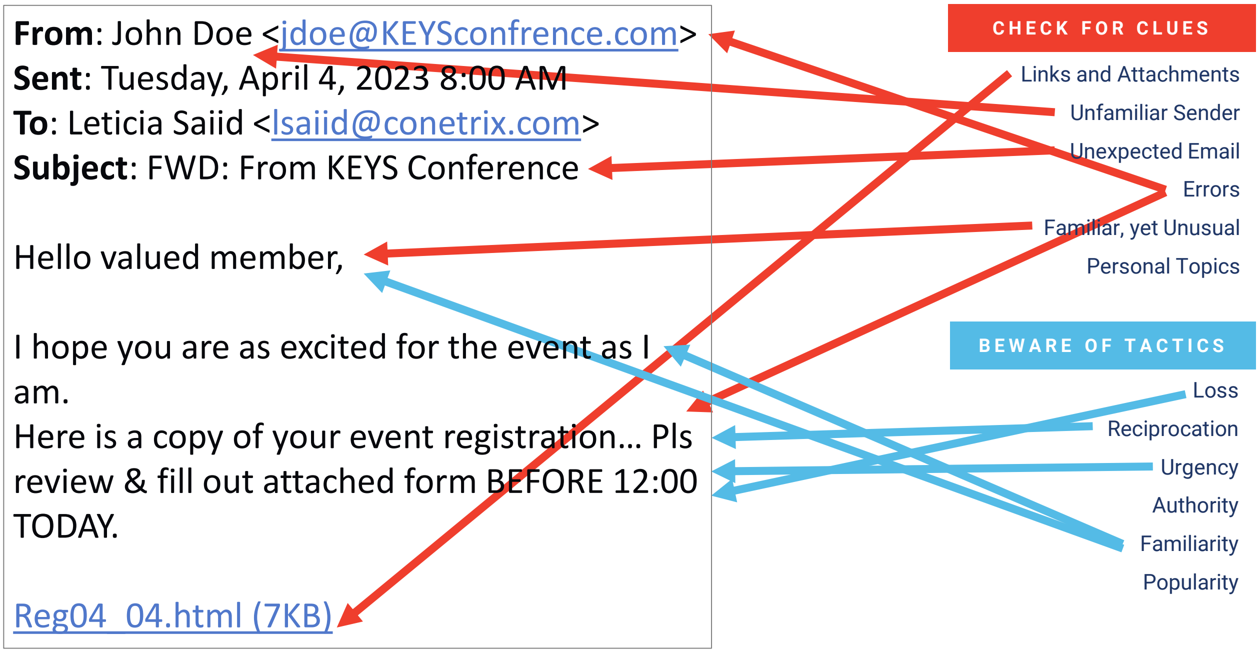
MAKE IT **MEASURED** EXAMPLE



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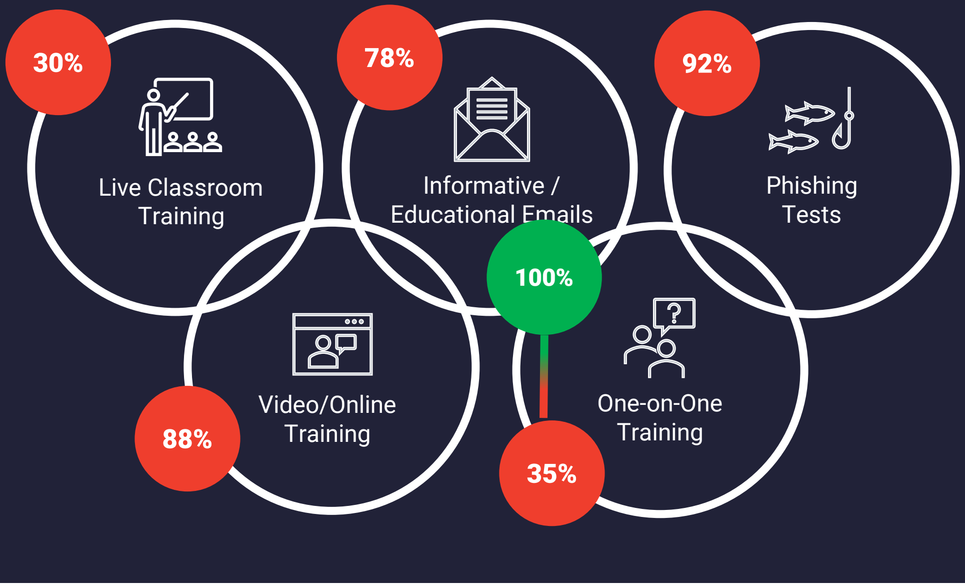
Training Methods



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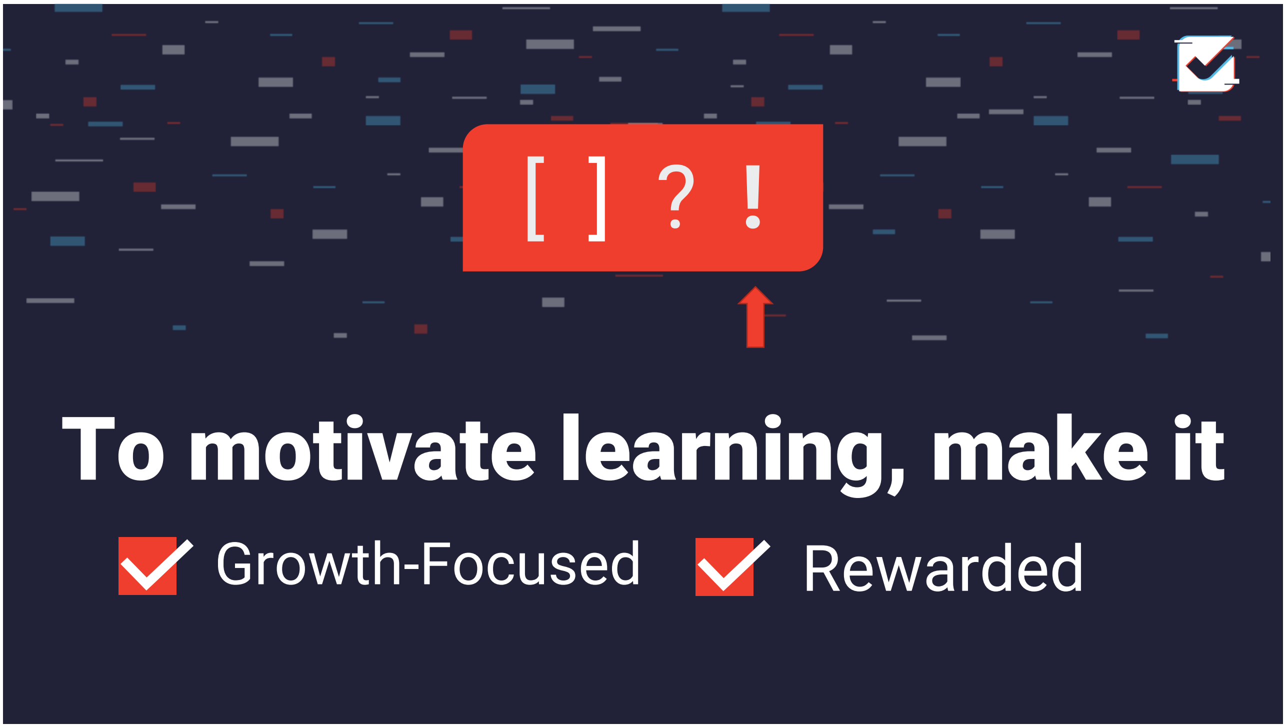

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To motivate learning, make it

☑ Growth-Focused ☑ Rewarded

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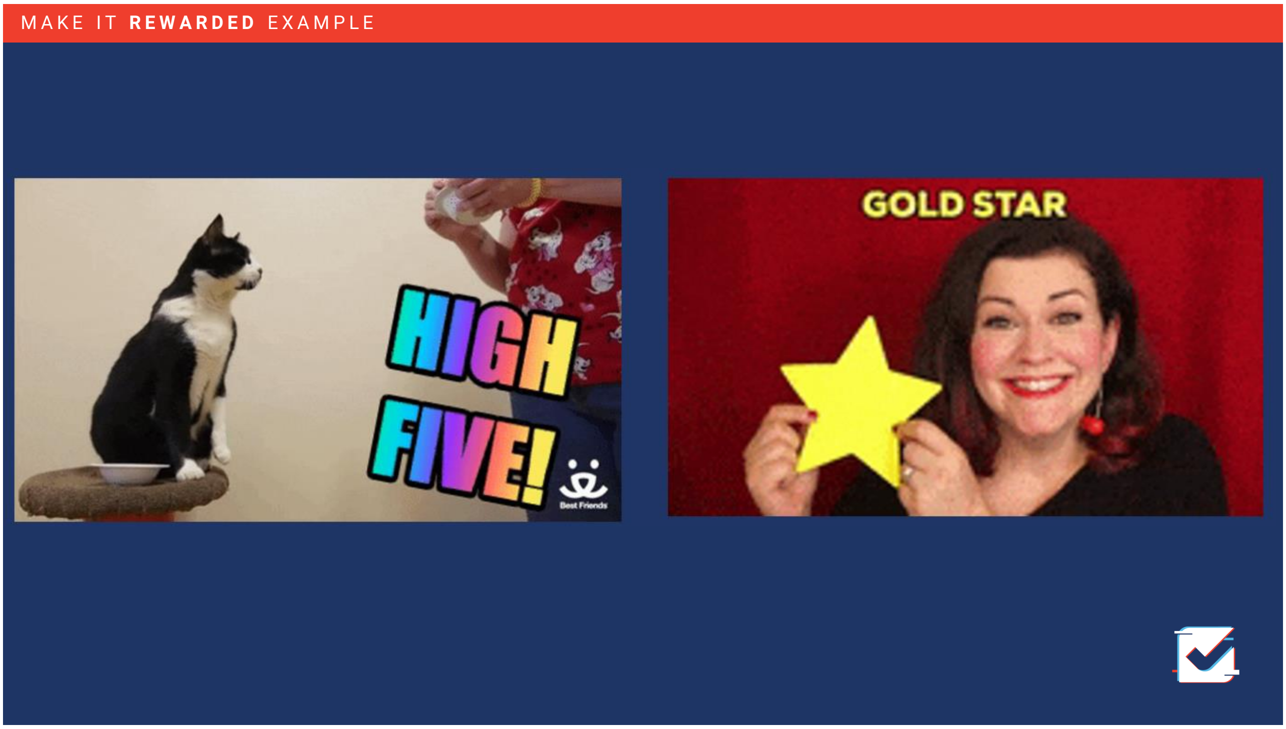

MAKE IT **REWARDED** EXAMPLE

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RECAP

[ ] ? !

Understand New Info
- ✓ Build
- ✓ Specific

Retain New Info
- ✓ Memorable
- ✓ Frequent

Solve Problems
- ✓ Automatic
- ✓ Measured

Motivate Learning
- ✓ Growth-Focused
- ✓ Rewarded

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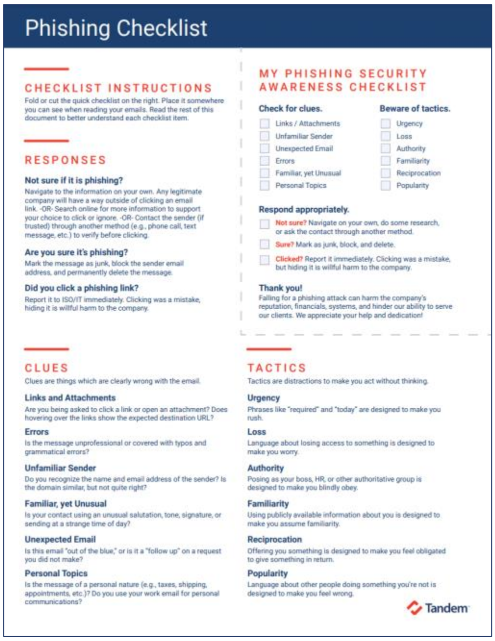

Phishing Checklist

CHECKLIST INSTRUCTIONS

Fold or cut the quick checklist on the right. Place it somewhere you can see when reading your emails. Read the rest of this document to better understand each checklist item.

RESPONSES

Not sure if it is phishing?
Navigate to the information on your own. Any legitimate company will have a way outside of clicking an email link. -OR- Search online for more information to support your choice to click or ignore. -OR- Contact the sender (if trusted) through another method (e.g., phone call, text message, etc.) to verify before clicking.

Are you sure it's phishing?
Mark the message as junk, block the sender email address, and permanently delete the message.

Did you click a phishing link?
Report it to ISO/IT immediately. Clicking was a mistake, hiding it is willful harm to the company.

MY PHISHING SECURITY AWARENESS CHECKLIST

Check for clues.
- □ Links / Attachments
- □ Unfamiliar Sender
- □ Unexpected Email
- □ Errors
- □ Familiar, yet Unusual
- □ Personal Topics

Beware of tactics.
- □ Urgency
- □ Loss
- □ Authority
- □ Familiarity
- □ Reciprocation
- □ Popularity

Respond appropriately.
- □ Not sure? Navigate on your own, do some research, or ask the contact through another method.
- □ Sure? Mark as junk, block, and delete.
- □ Clicked? Report it immediately. Clicking was a mistake, but hiding it is willful harm to the company.

Thank you!
Falling for a phishing attack can harm the company's reputation, financials, systems, and hinder our ability to serve our clients. We appreciate your help and dedication!

CLUES

Clues are things which are clearly wrong with the email.

Links and Attachments
Are you being asked to click a link or open an attachment? Does hovering over the links show the expected destination URL?

Errors
Is the message unprofessional or covered with typos and grammatical errors?

Unfamiliar Sender
Do you recognize the name and email address of the sender? Is the domain similar, but not quite right?

Familiar, yet Unusual
Is your contact using an unusual salutation, tone, signature, or sending at a strange time of day?

Unexpected Email
Is this email "out of the blue," or is it a "follow up" on a request you did not make?

Personal Topics
Is the message of a personal nature (e.g., taxes, shipping, appointments, etc.)? Do you use your work email for personal communications?

TACTICS

Tactics are distractions to make you act without thinking.

Urgency
Phrases like "required" and "today" are designed to make you rush.

Loss
Language about losing access to something is designed to make you worry.

Authority
Posing as your boss, HR, or other authoritative group is designed to make you blindly obey.

Familiarity
Using publicly available information about you is designed to make you assume familiarity.

Reciprocation
Offering you something is designed to make you feel obligated to give something in return.

Popularity
Language about other people doing something you're not is designed to make you feel wrong.

Tandem

Free Resource

https://tandem.app/ph-checklist

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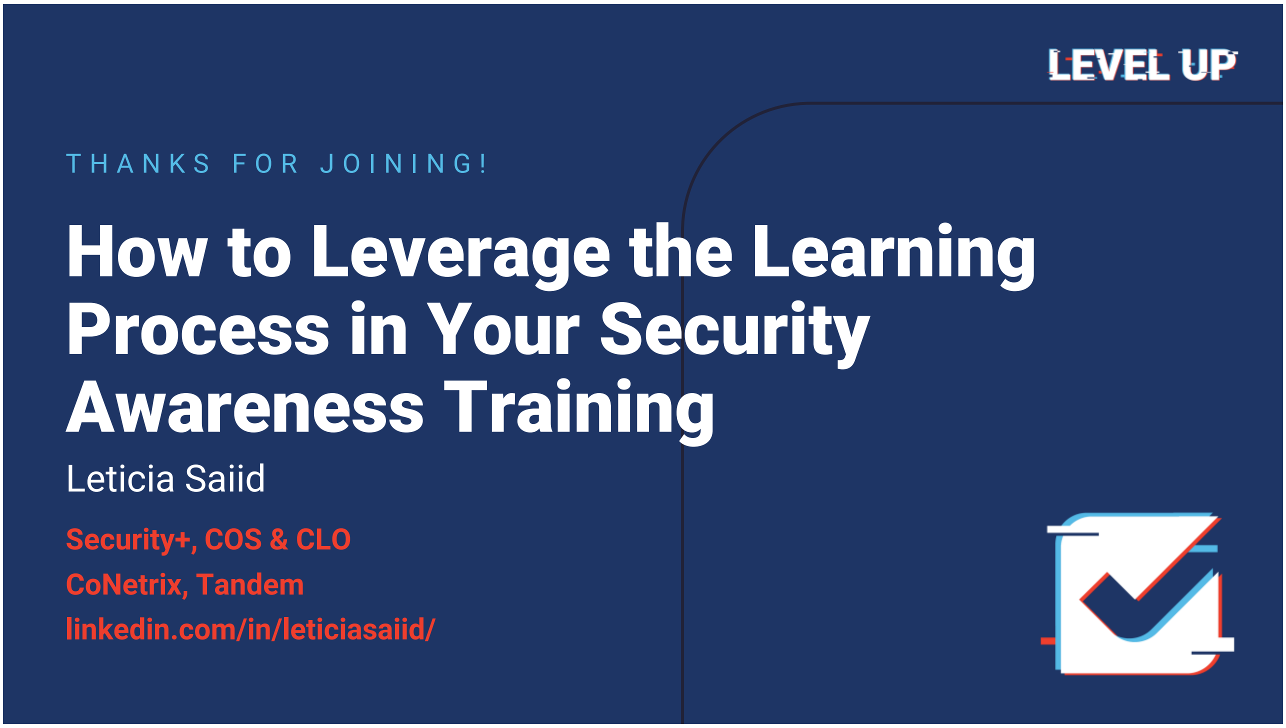

LEVEL UP

THANKS FOR JOINING!

How to Leverage the Learning Process in Your Security Awareness Training

Leticia Saiid

Security+, COS & CLO

CoNetrix, Tandem

linkedin.com/in/leticiasaiid/

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