

Building a people-led security culture

Joshua Qwek

CISO Perth 2023



Building a people-led security culture

 Manufacturing

 Education

 Finance & Banking

 Health Insurance

 Advisory Services



Joshua Qwek
Cybersecurity Architect

Agenda

Building a people-led security culture

- 1 The Golden Age of Cyber Awareness
- 2 The Never-ending Quest
- 3 From Awareness to Culturalisation
- 4 The Measure of ~~Success~~ Progress

**Building a
people-led
security
culture**

The Golden Age of Cyber Awareness



“

**Awareness awakes,
Culturalization blooms,
Diversity thrives.**



Building a people-led security culture

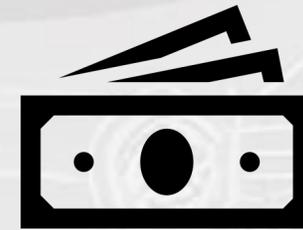
The Golden Age of Cyber Awareness



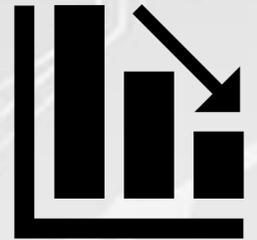
Overworked



Understaffed



Over Budget



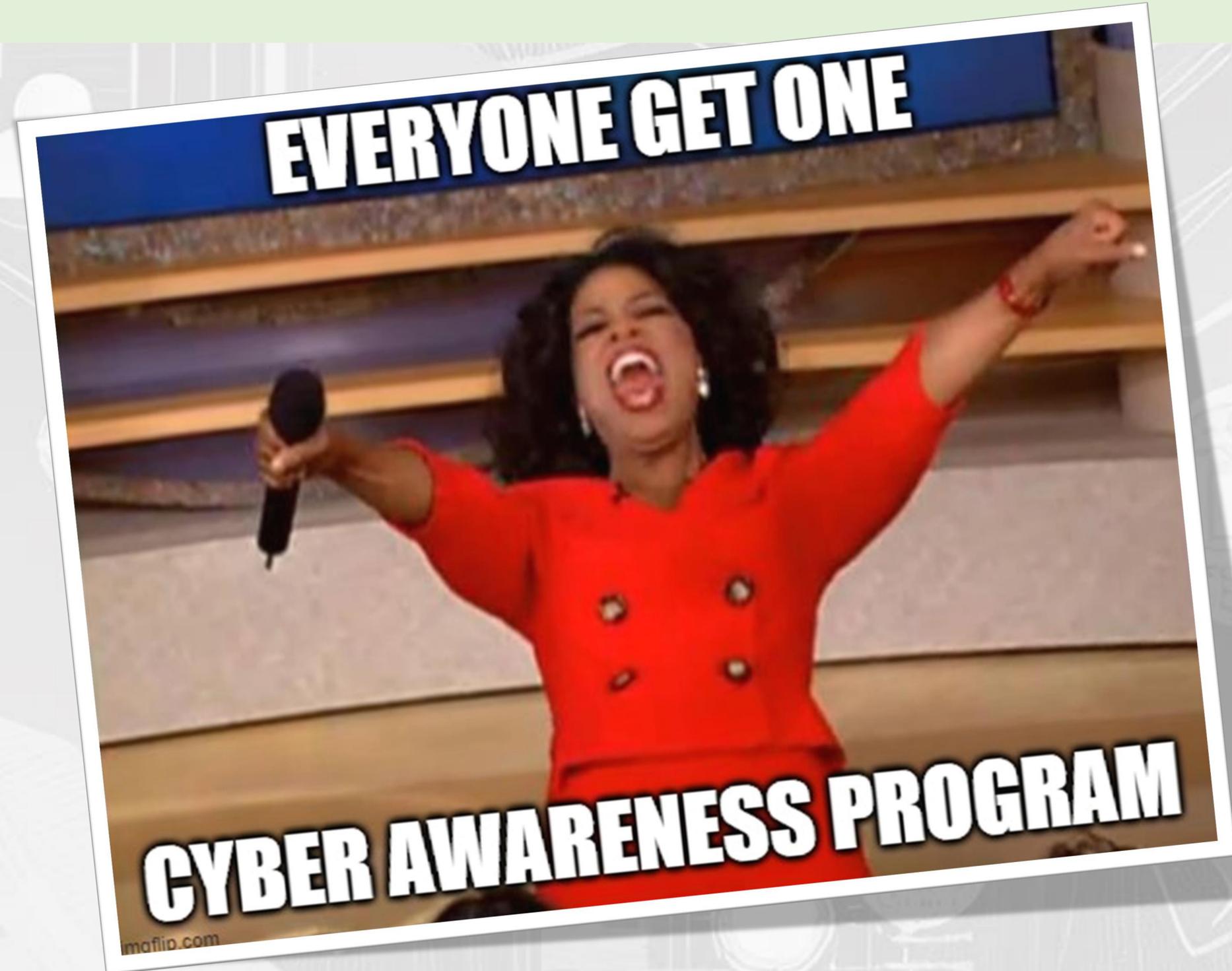
Underutilize



Still conducting awareness session
& regular phishing simulation testing.

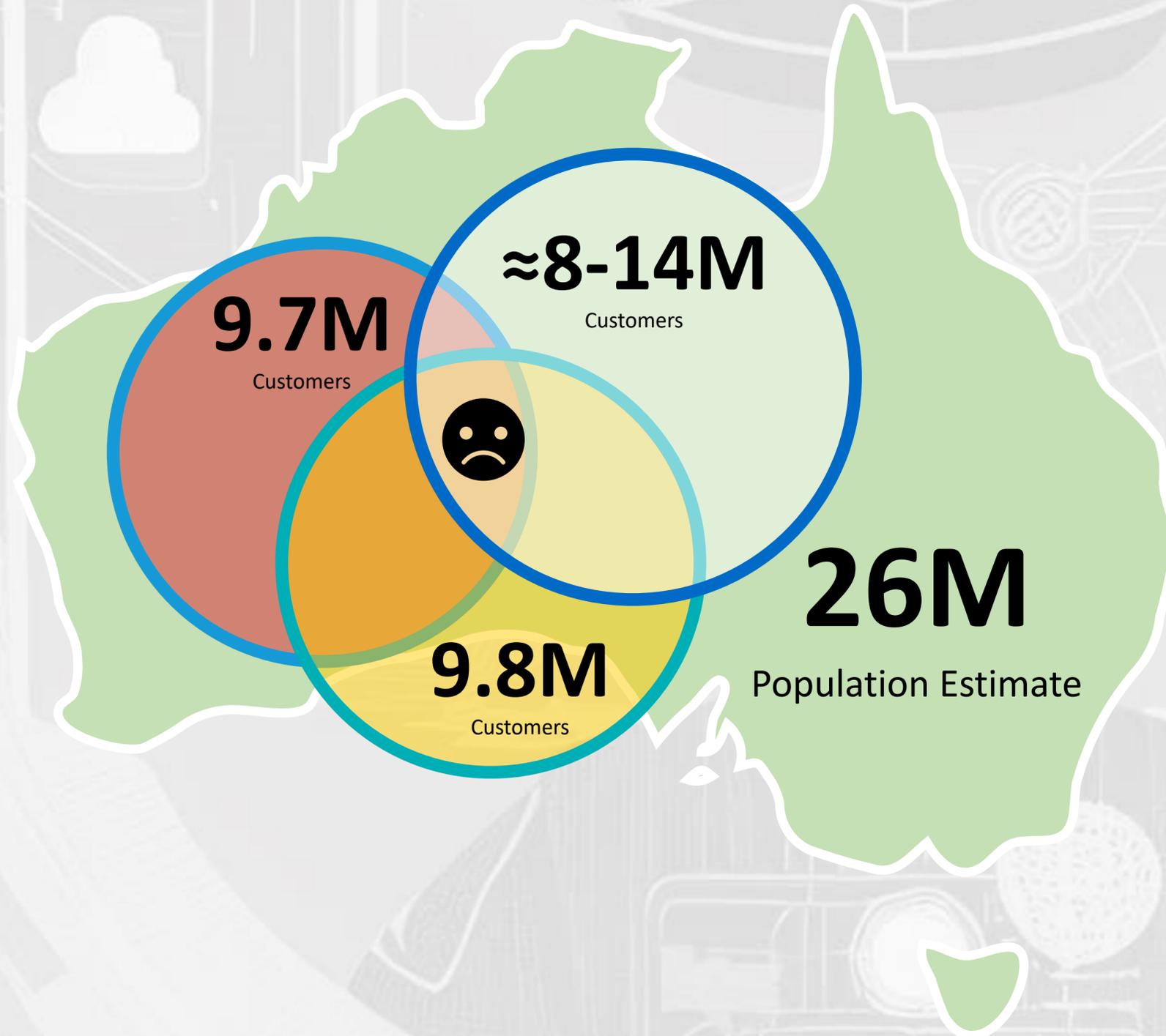
**Building a
people-led
security
culture**

The Golden Age of Cyber Awareness



Building a people-led security culture

The Golden Age of Cyber Awareness



“Never let a good crisis go to waste.”

Sir Winston Churchill



Building a people-led security culture



The Golden Age of Cyber Awareness

Enisa's AR-In-A-Box		
Cyberbullying	Financial Scams	Malware
Online Gaming	Mobile Banking	Phishing
Online Pornography	Device Safety	Ransomware
Safe Internet	Email Spam	Cyber Upskilling
Sexting	Business Email Compromise Fraud	Cyber Terrorism
Fake News	Password Attacks	Certifications
Privacy & Data Protection	Data Breach	



enisa.europa.eu

Building a people-led security culture

The Golden Age of Cyber Awareness



Search Content FILTER: Modules 5 Assessments 2 More Filters 3 SORT

168 results

- Select All
- Animated Video
- Interactive
- Live Action Video
- Multi-Path Adventure
- Training Game

Social Engineering: Many Metho...
Module Adaptive Learning Assessment
Runtime: 2 mins • Languages: 42

What Is 'the Cloud'? Assessment
Module Adaptive Learning Assessment
Runtime: 2 mins • Languages: 42

Unintentional Insider Threats As...
Module Adaptive Learning Assessment
Runtime: 2 mins • Languages: 42

Broad-Based Adaptive Learning ...
Module Adaptive Learning Assessment
Runtime: 10 mins • Languages: 42

The Problem With Public Wi-Fi A...
Module Adaptive Learning Assessment
Runtime: 2 mins • Languages: 42

**Building a
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culture**

The Never-Ending Quest



“

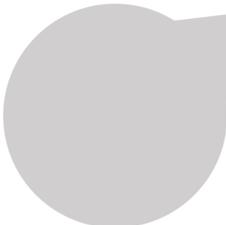
**With each step we take,
The measure of success grows,
Progress sets the pace.**





The Never-Ending Quest

 Connect

 Information Security GRC Specialist
2h • 

I had an amusing experience in an infosec awareness course I was delivering via Teams this morning. While we were doing the ice breaker, one of the participants obviously did not realise they were unmuted, and was talking to a team mate off camera or taking a phone call and said "yeah, I'm doing cyber security training, it's so friggin' boring!"

Now this was about 10 minutes into the ice breaker, and I hadn't covered any content, so I choose to believe it wasn't about me and therefore didn't take this personally. But it is quite instructive (no pun intended) about some people's attitudes towards and experiences of cyber security training, it often is friggin' boring.

[#dontbeboring](#)



The Never-Ending Quest

Hi,

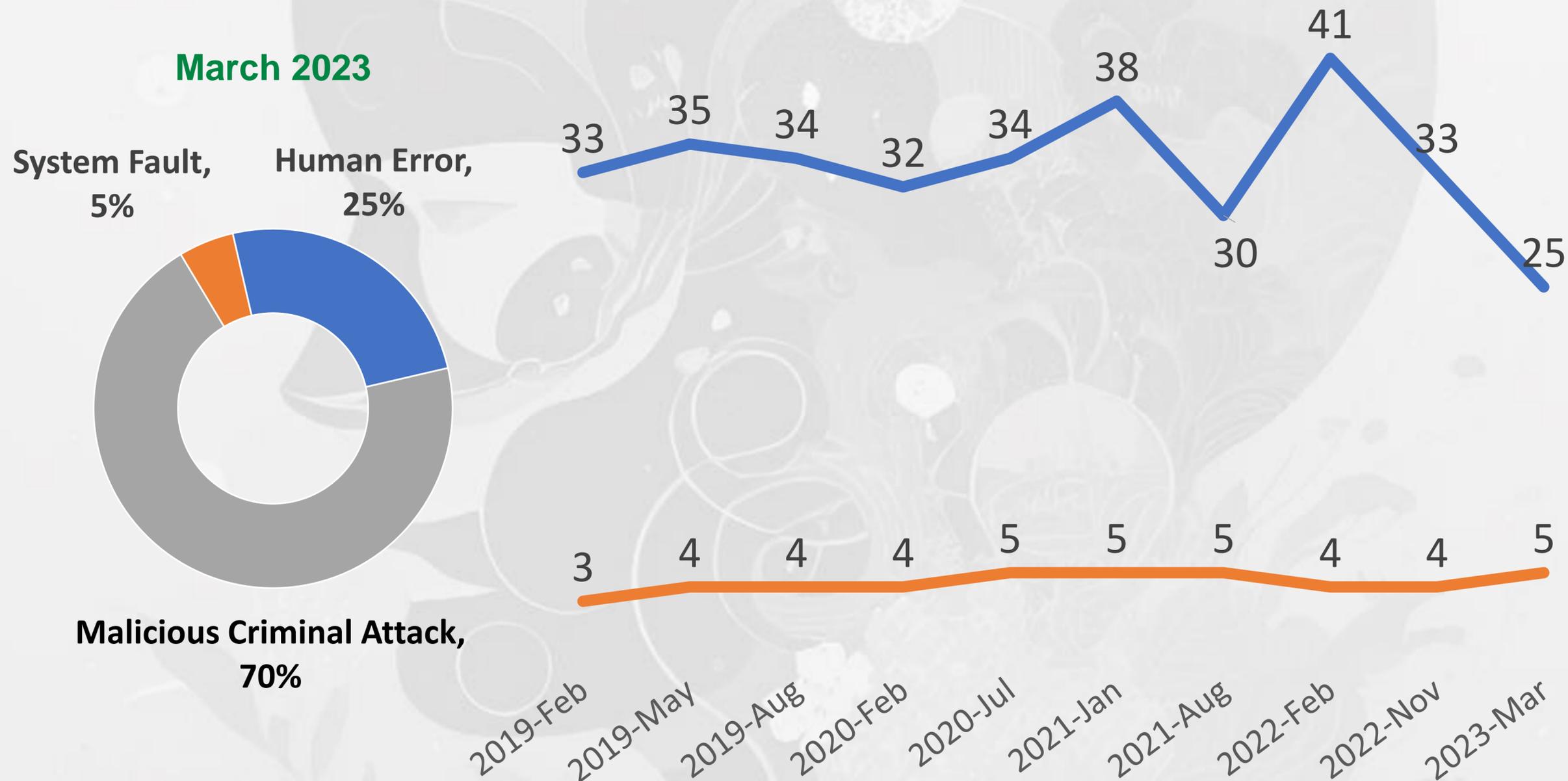
Please see my snippet of the amount of phishing emails I'm getting. I feel I've been well tested for the month of February, and I'd rather pack up my phishing gear and go down the pub and talk about the one that got away 😊

Is there a possibility I can have no more phishing? Three big phish in one day is too much for me to handle, I even caught two at the same time (8.35). My bad days phishing is spoiling my good days work.

Also, none are going to get away when I know they're coming I'm a seasoned phisher. 



The Never-Ending Quest





The Never-Ending Quest



“Am I showing
the right screen?”



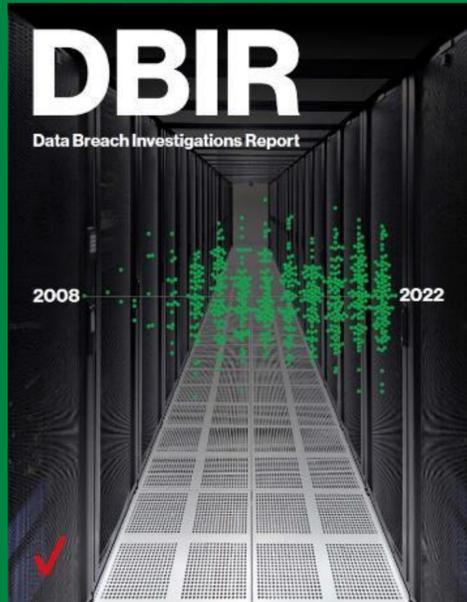
“You are on
mute!”



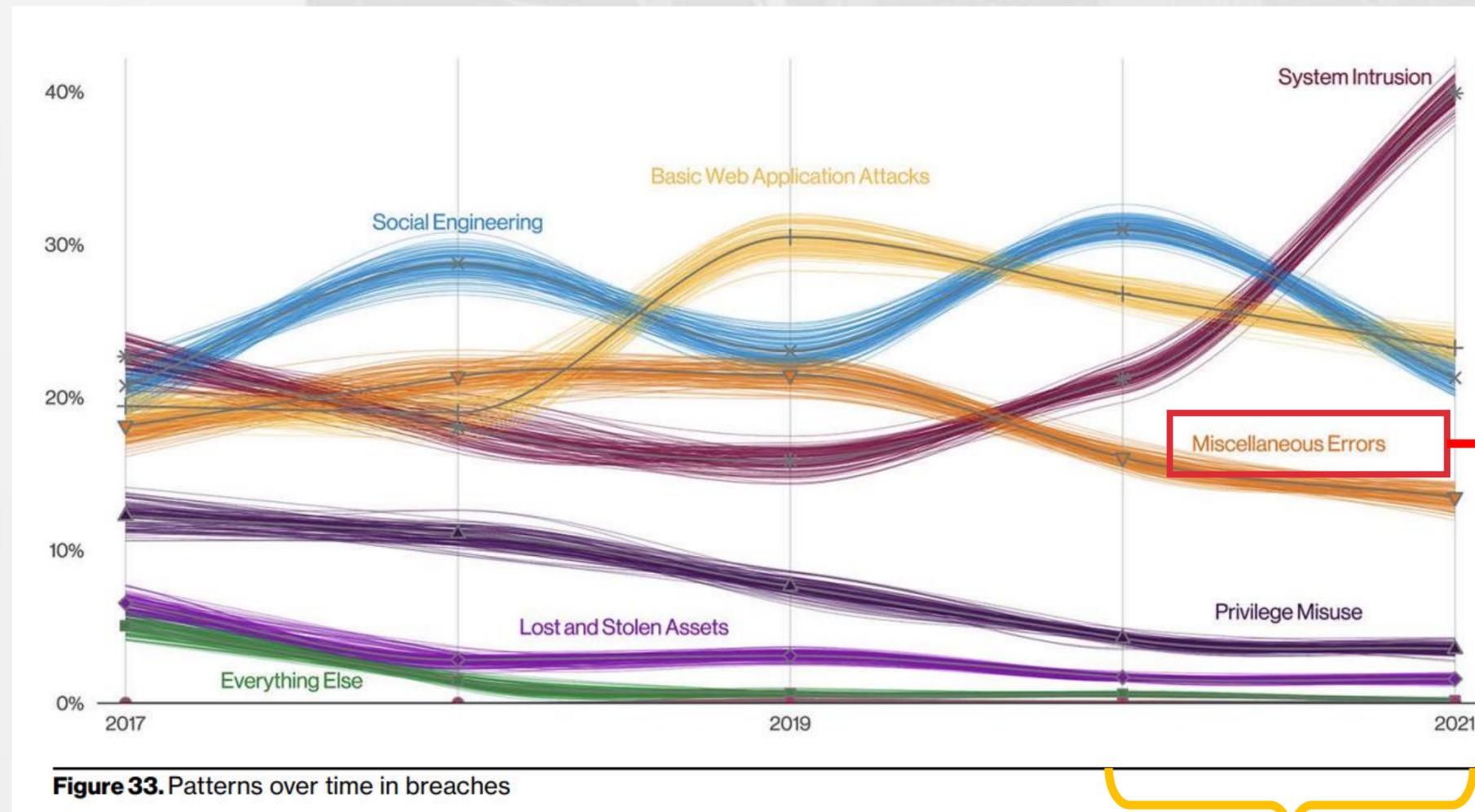
“Sorry... I pocket
dialed”

Building a people-led security culture

The Never-Ending Quest



[2022-data-breach-investigations-report-dbir.pdf \(verizon.com\)](https://www.verizon.com/resources/reports/2022-data-breach-investigations-report-dbir.pdf)



12%-ish

Human Mistakes
(Mis-delivery & Mis-configuration)

Miscellaneous Errors

82%

Human Element



The Never-Ending Quest



Section 1.4 Definitions of Cybersecurity Awareness

Level of appreciation, understanding or knowledge of cybersecurity aspect...

... Awareness is not training...

The purpose... simply to focus on security...

... recognise IT security concerns and respond accordingly...

Awareness ≠ Competency

The Never-Ending Quest



Digital Immigrant



Neurodivergent



**Culturally
Engaging**



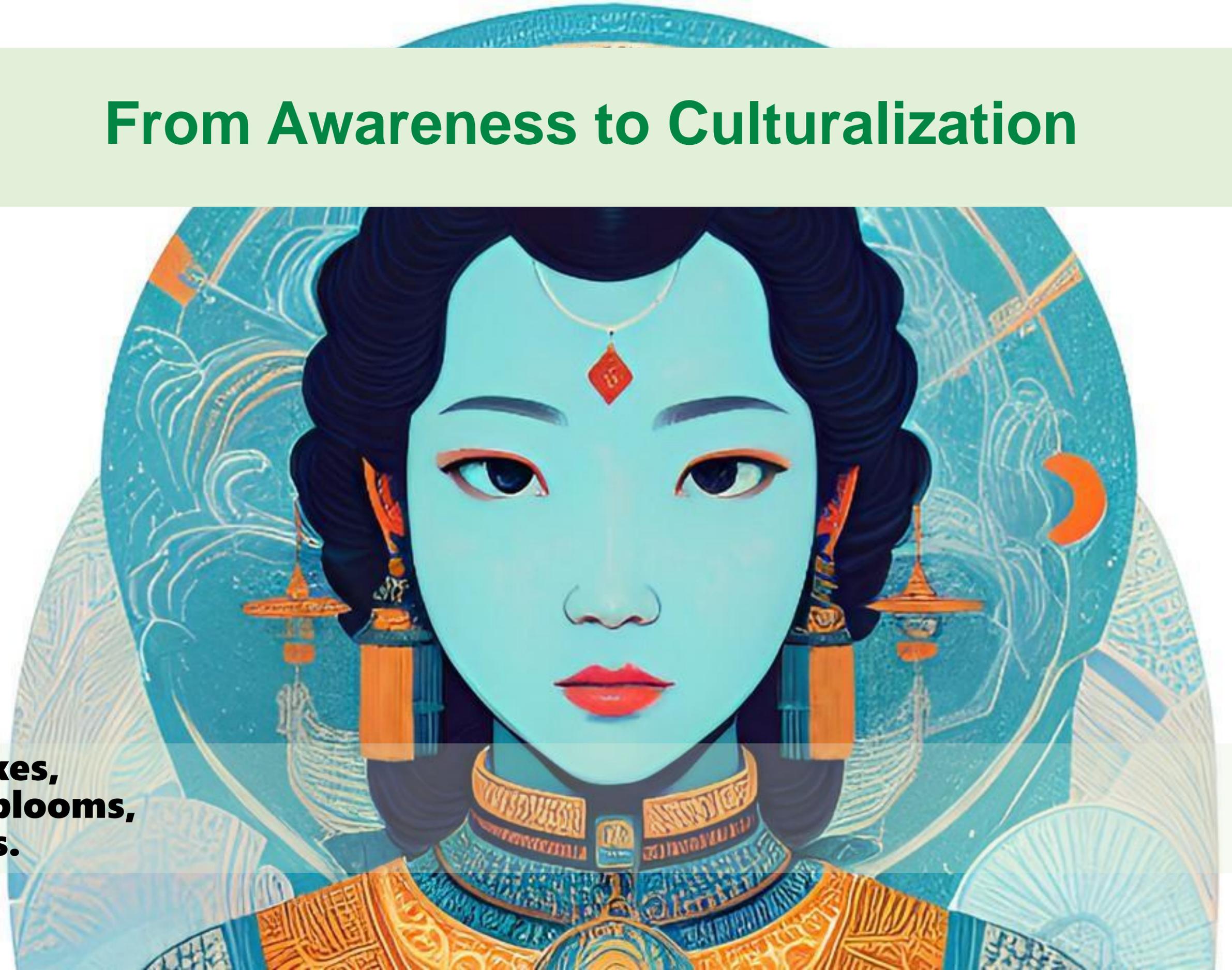
**Role Specific
Content**

**Building a
people-led
security
culture**

From Awareness to Culturalization

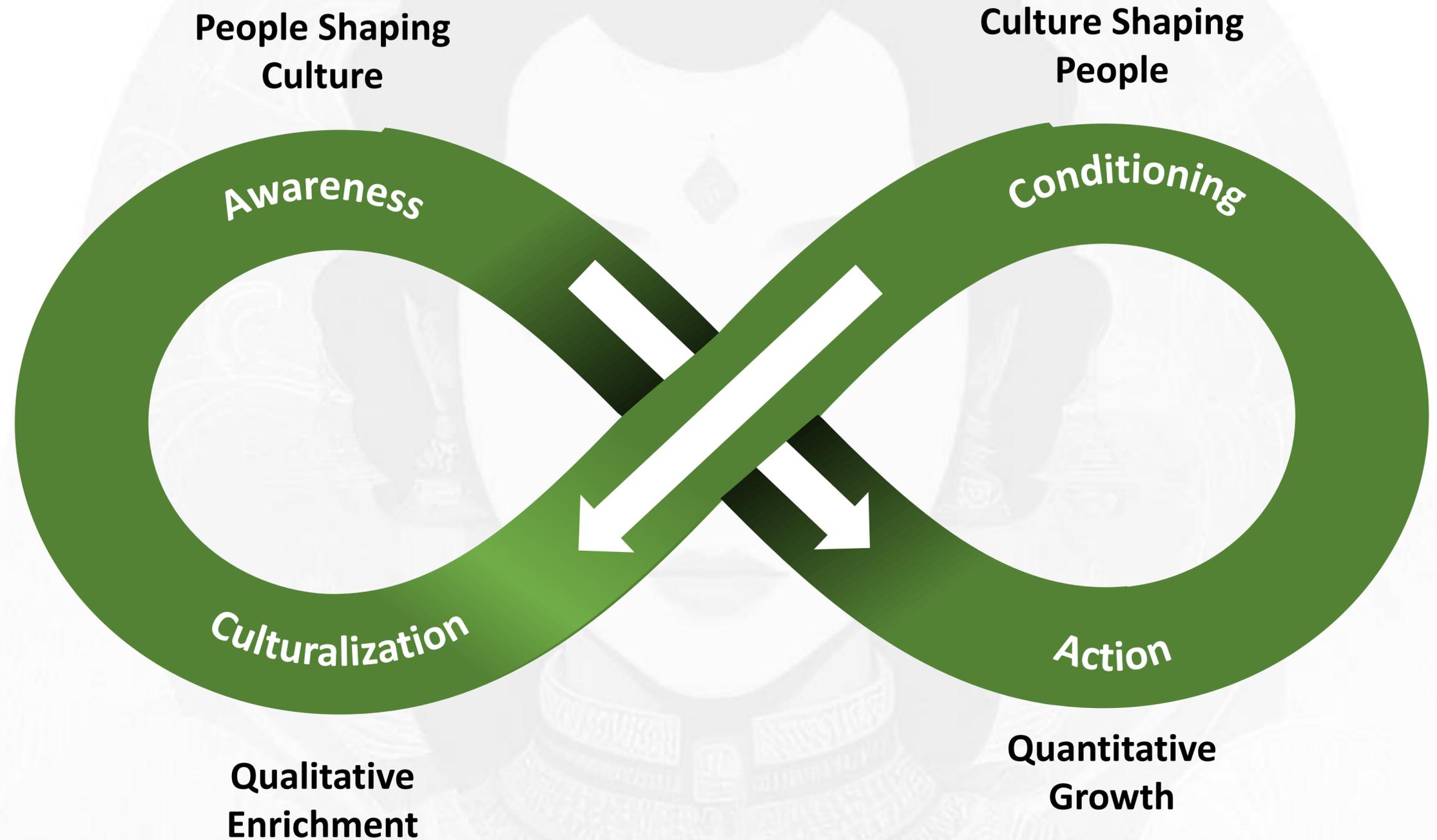


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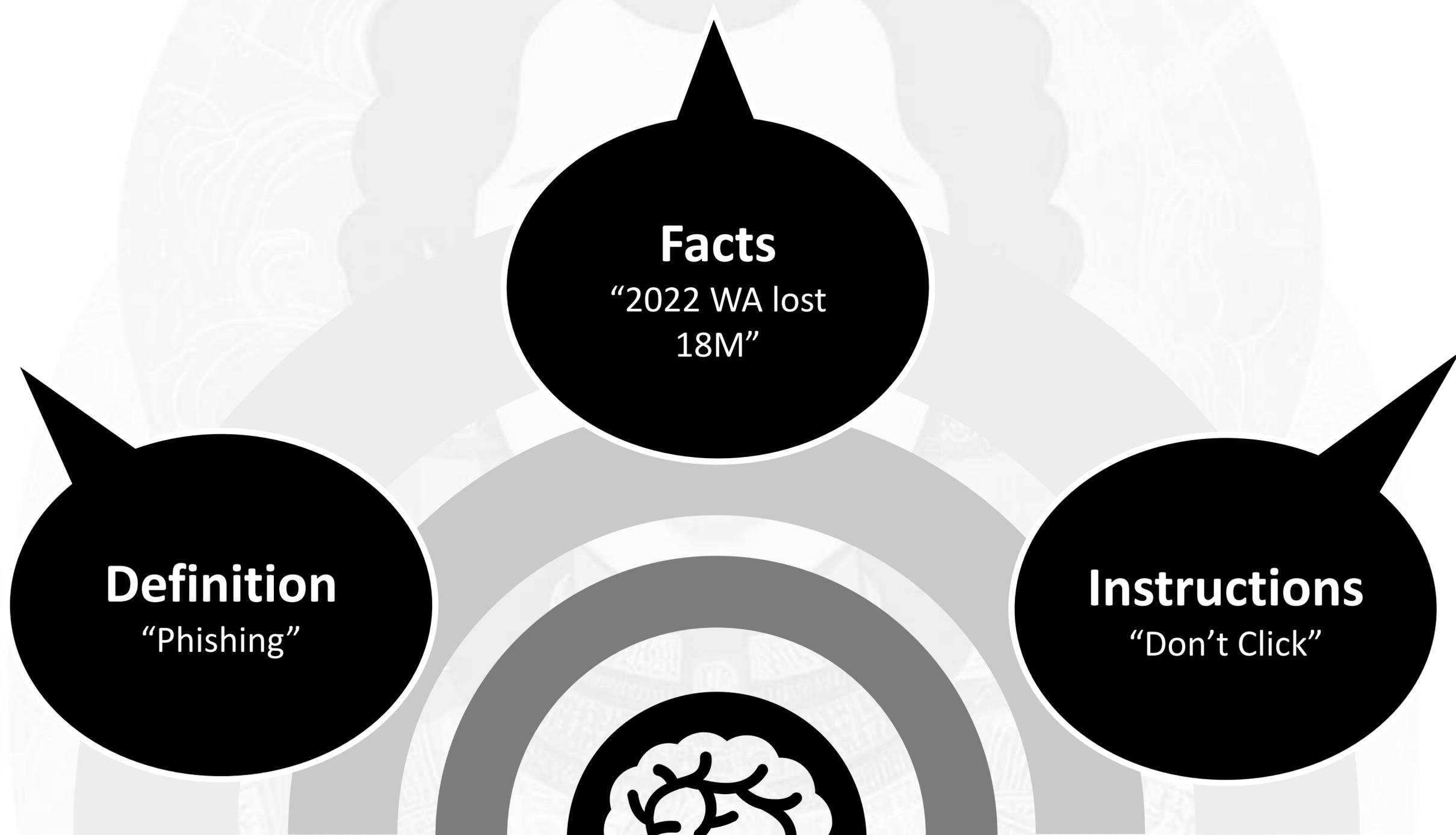


Building a people-led security culture

From Awareness to Culturalization



From Awareness to Culturalization



Facts

"2022 WA lost
18M"

Definition

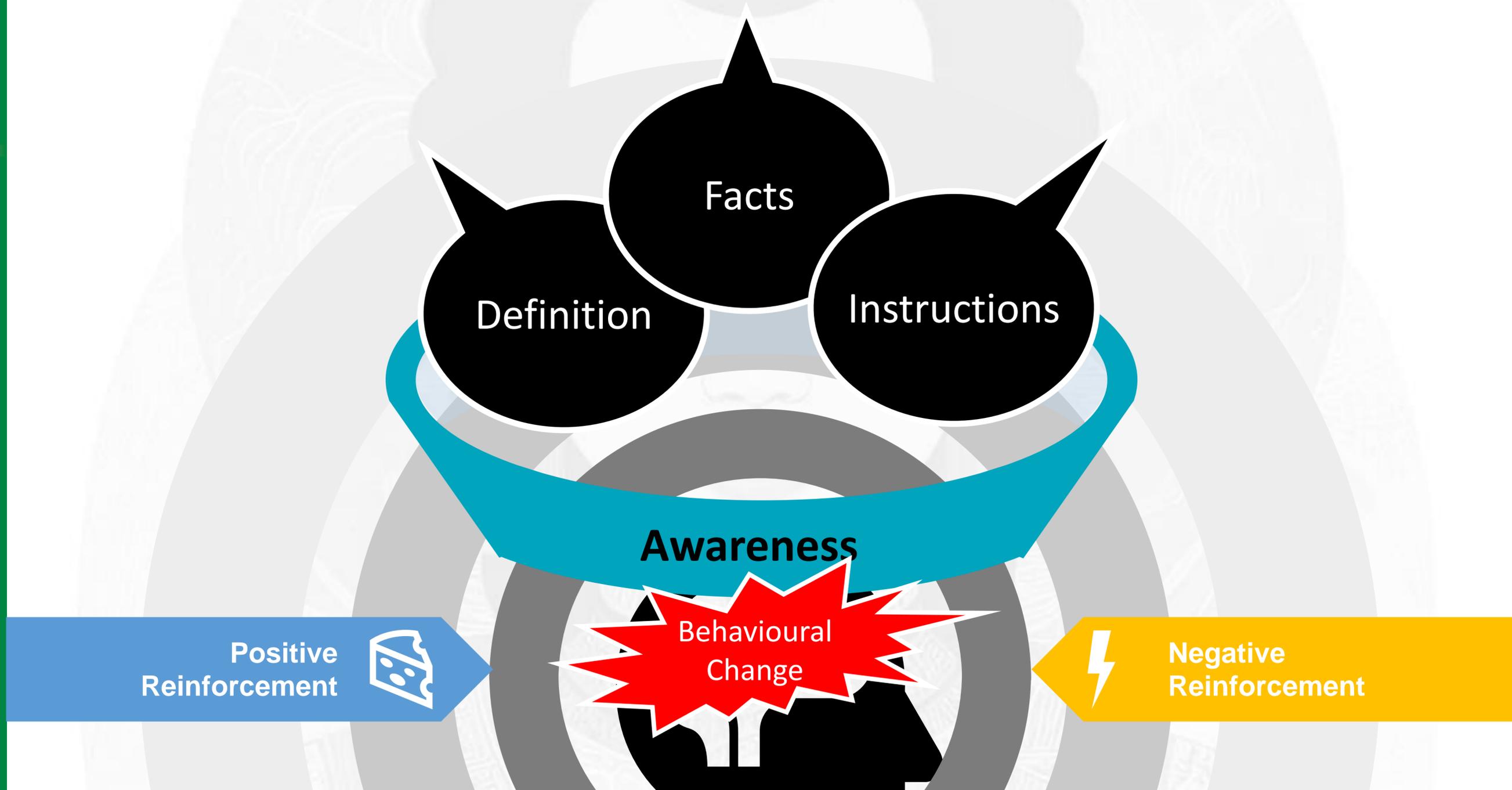
"Phishing"

Instructions

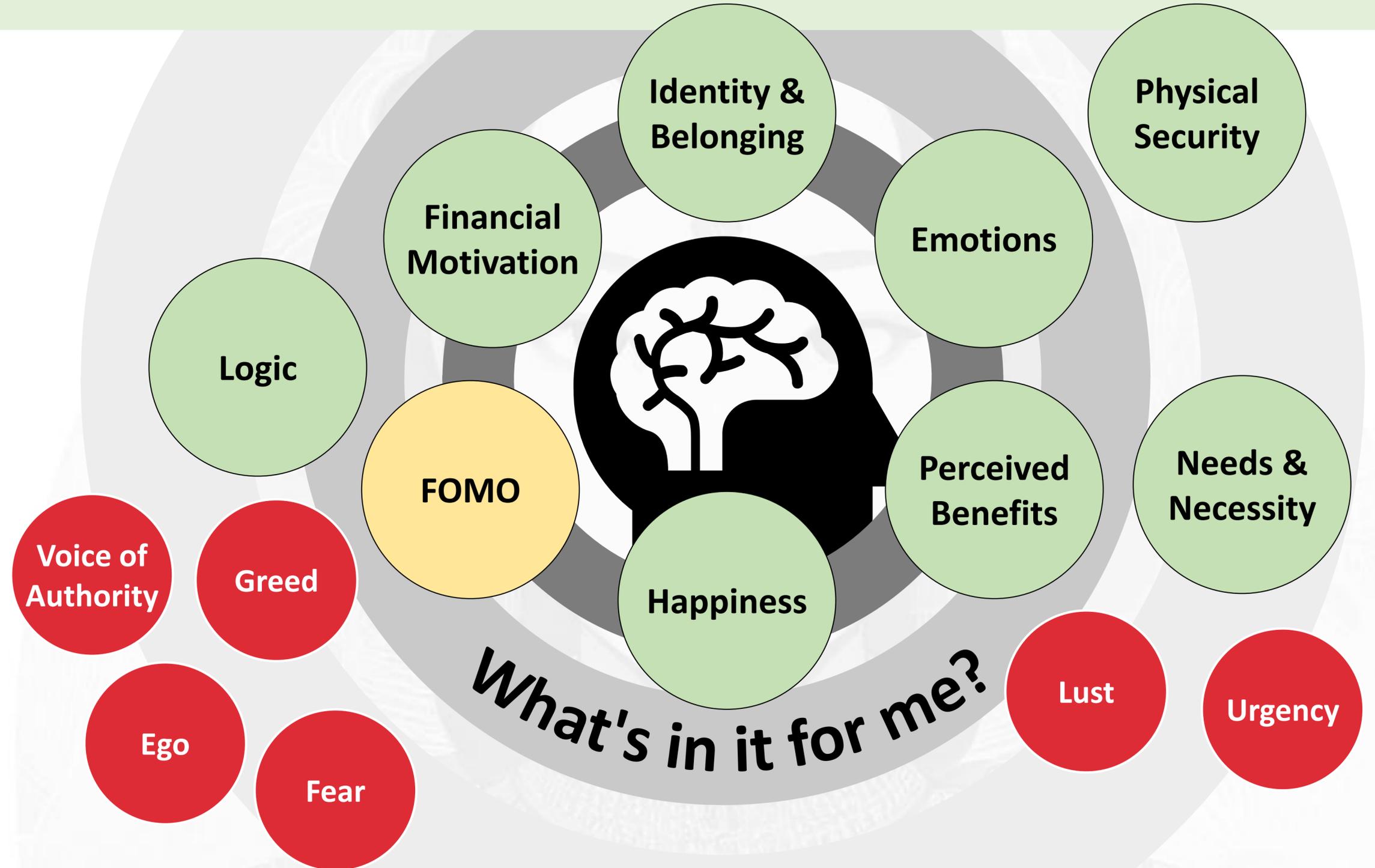
"Don't Click"



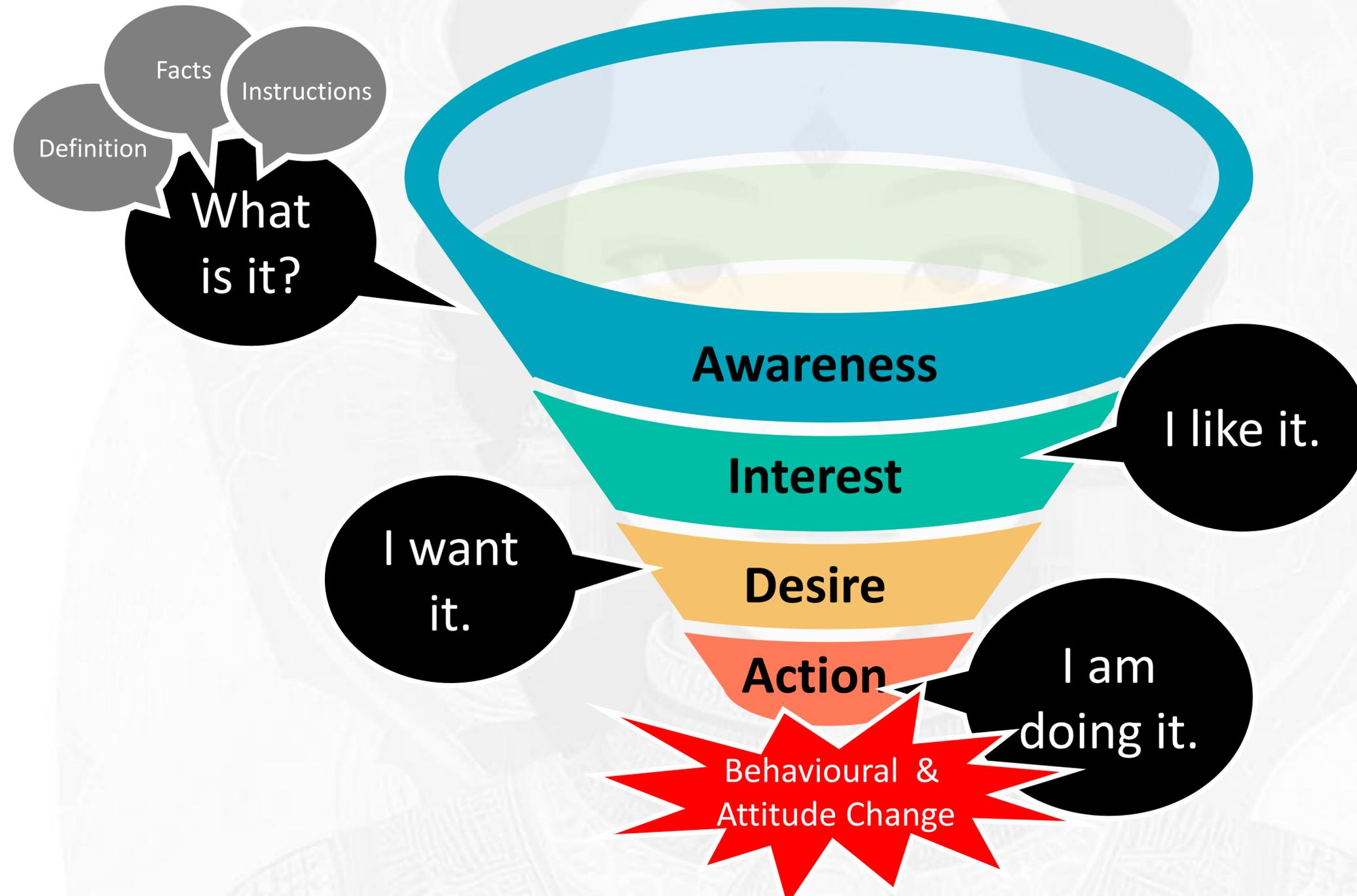
From Awareness to Culturalization



From Awareness to Culturalization



From Awareness to Culturalization



From Awareness to Culturalization



**PREPAREDNESS 101:
ZOMBIE PANDEMIC**

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

The illustration shows a dark, foggy street at night with several zombies. One zombie in the foreground has a speech bubble that says "A ZOMBIE VIRUS?". The background shows a building with a "GARAGE" sign.

IN OTHER NEWS, SEVERAL PEOPLE HAVE BEEN HOSPITALIZED AFTER A STRANGE VIRUS BEGAN SPREADING RAPIDLY THROUGH THE SOUTHEAST...

A ZOMBIE VIRUS?

THE ZOMBIE VIRUS IS SPREADING RAPIDLY INFECTING 21 PEOPLE FOR EVERY INFECTED PERSON.

ALL-HAZARDS EMERGENCY KIT

Assemble the following items to create a kit for your home, office, school, or vehicle:

- Water—one gallon per person, per day
- Food—nonperishable
- Sanitation/personal hygiene items and bleach
- Medications (7 day supply and medicinal dispensers if necessary)
- Multipurpose supplies (wrench, pliers, plastic sheet, duct tape, scissors, matches)
- Sanitation/personal hygiene items and bleach
- Copies of personal documents (medication list and pertinent medical information, proof of address, deed/lease to home, passports, birth certificates, insurance policies)
- Cell phone with charger
- Family Disaster Plan (family and emergency contact information)
- Extra cash
- Emergency blanket, extra clothes, sleeping bag (1 for each person)
- Map(s) of the area

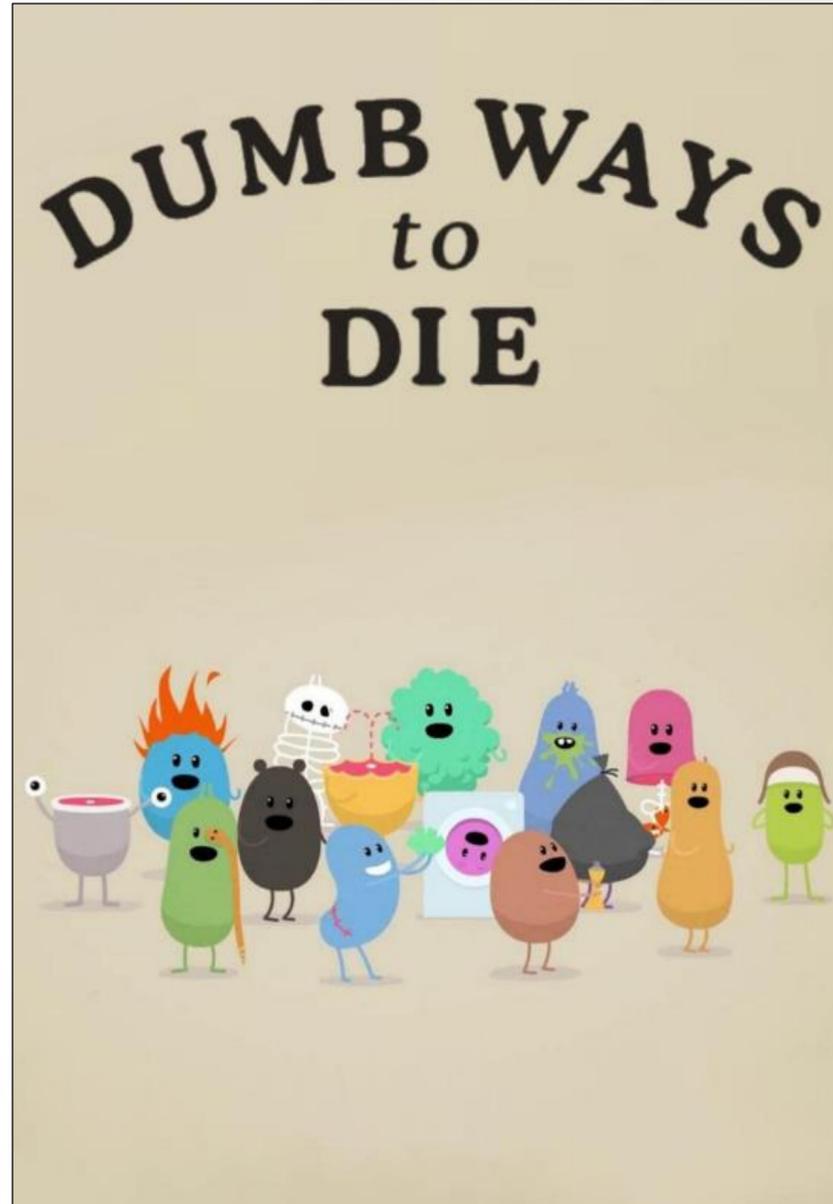
Consider the needs of all family members and add supplies to your kit. Suggested items to help meet additional needs are:

- Specific medical supplies (hearing aids/extra batteries, glasses, contact lenses, syringes, cane)
- Baby supplies (bottles, formula, baby food, diapers)
- Games and activities for children
- Pet supplies (collar, leash, ID, food, carrier, bowl)
- Two-way radios
- Extra set of car keys and house keys

For more information visit: www.cdc.gov/phpr

Building a people-led security culture

From Awareness to Culturalization



Dumb Ways to Die 12+

#3 in Action

★★★★★ 4.3 • 22.2K Ratings

Free · Offers In-App Purchases



Dumb Ways to Die

Dumb Ways to Die ✓
1.2M subscribers

Subscribe

3M

Share

266M views 10 years ago
Get our latest mobile game!
Apple - <https://tinyurl.com/dumbwaysapple>
Google Play - <https://tinyurl.com/dumbwaysandroid> Show more

Help is available Lifeline
Speak with someone today

Lifeline Australia
Hours: Available 24 hours. [Learn more](#)

13 11 14

Call Chat Official website

SMS: 0477 131 114

[Dumb Ways to Die](#)



7 Webby Awards

International Academy of Digital Arts & Sciences
2013



5 Grand Prix
18 Gold, 3 Silver, 2 Bronze

Cannes Lion International Festival of Creativity 2013



3 Siren Award

Commercial Radio Australia
2013



Grand Trophy

New York Festivals
International Advertising Awards
2013

From Awareness to Culturalization



- 01** **Work with educators and/or marketers**

Adult learning is a lot more complex than designing a nice poster. The message, medium and method need to be appropriate.
- 02** **Take a Whole-Person approach**

Team members are also parents, siblings, children, carers, friends and community members. Make meaningful content that will help them outside of “work”.
- 03** **Changing mindset and attitude, not just action.**

People are not lab rats; teach them to think and develop their ability to cope with technology changes.
- 04** **Derive learning from Incident**

Make training meaningful and realistic by drawing on near misses and incidents, not just canned templates that will not pass your email gateway in the first instance.
- 05** **Don't overload you audience**

There is always a point where “too-much” information results in people subconsciously rejecting the message.
- 06** **Remember the law of diminishing return**

Unless you have unlimited resources, you must plan how to deliver the message. Invest appropriately in technical and procedural control to complement the training.

From Awareness to Culturalization



Conditioning

Externally stimulated and modified behaviour.

Culturalization

The DNA of who we are.



From Awareness to Culturalization



Organisation culture can limit the effectiveness of the cyber strategy.



Culture is persistent and will outlast many cyber strategy.



Successful cyber strategy leverages dominant cultural traits instead of against them.

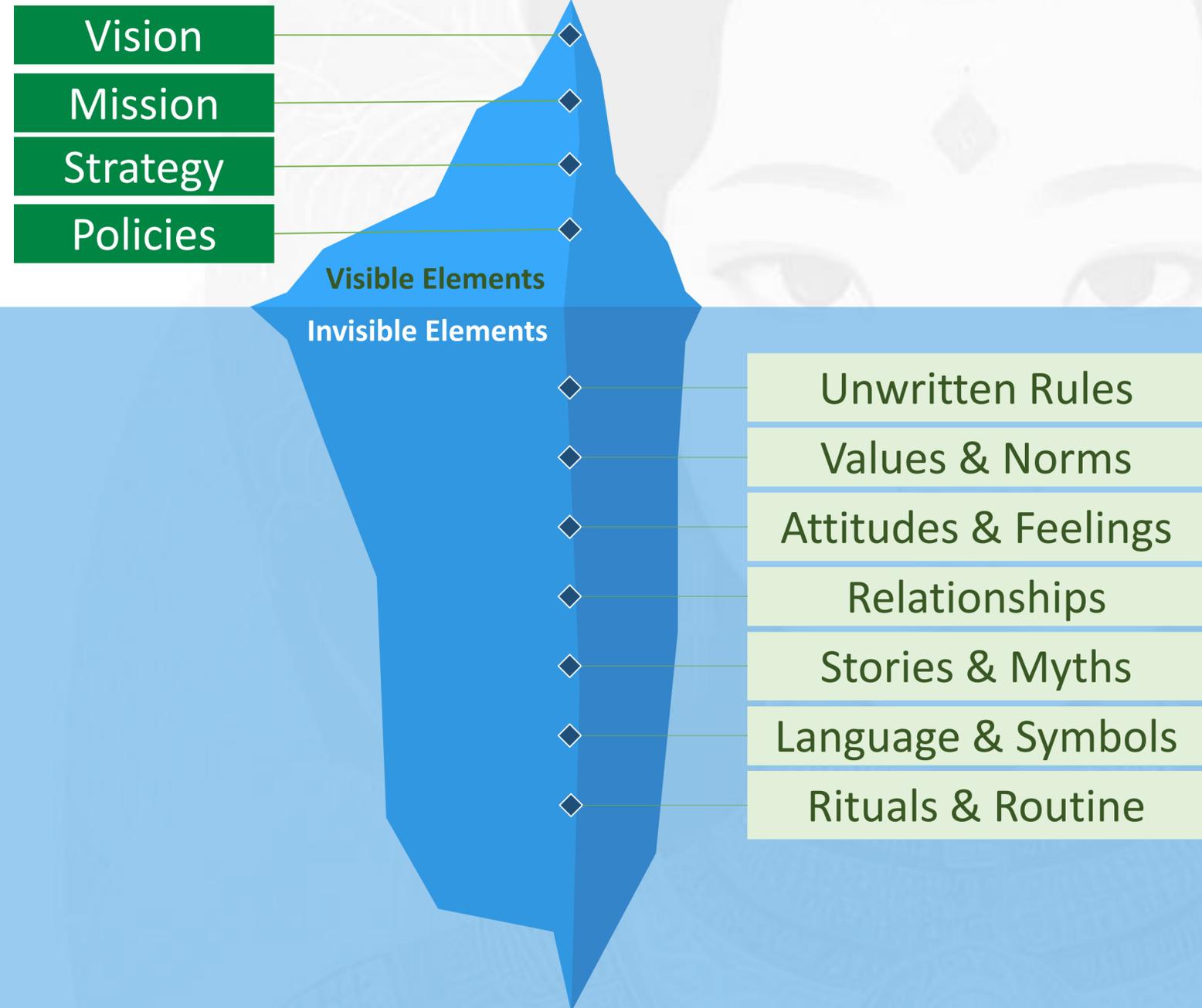
“Culture eats strategy for breakfast”

Peter Drucker



Building a people-led security culture

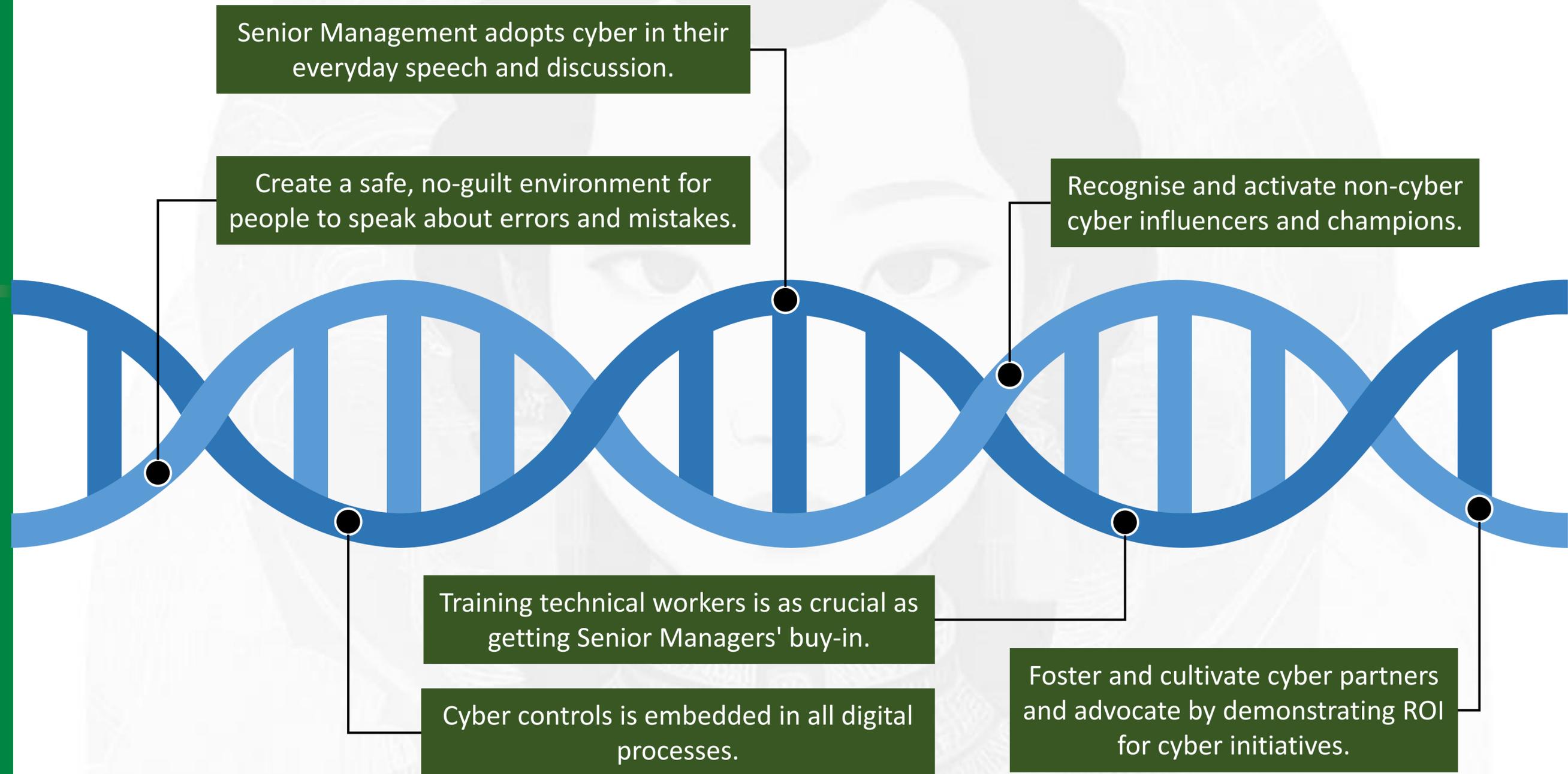
From Awareness to Culturalization



- “ **Climate Policy**
- “ **Covid Vaccination**
- “ **Gender Equality**

Building a people-led security culture

From Awareness to Culturalization



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The Measure of Success Progress

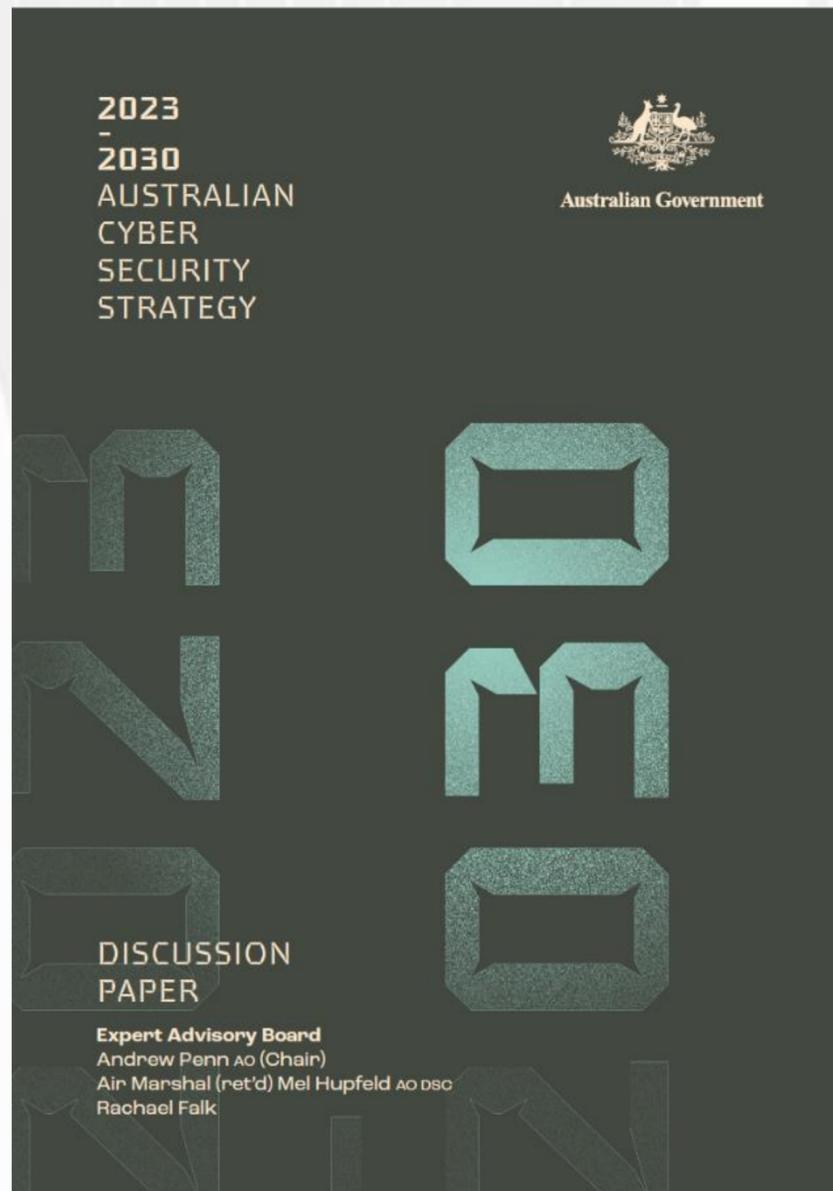


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Building a people-led security culture

The Measure of Success Progress

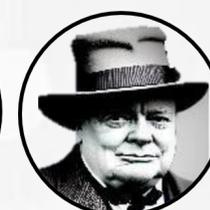


[2023-2030 Australian Cyber Security Strategy
\(homeaffairs.gov.au\)](https://www.homeaffairs.gov.au)

**“Most cyber secure nation
by 2030”**

**“Success is going
from failure to failure
without loss of
enthusiasm.”**

*Sir Winston Churchill,
Abraham Lincoln*



**“You can’t improve
what you don’t
measure”**

Peter Drucker



Building a people-led security culture

The Measure of Success Progress



Measured Analytics

Phishing Simulations

- Read Email
- Clicked Link
- Opened Attachment
- Entered Credential

Training Records

- Completion
- Assessment

Incident Report

- Root Cause
- Trending
- Threat environment

A Culture of Feedback

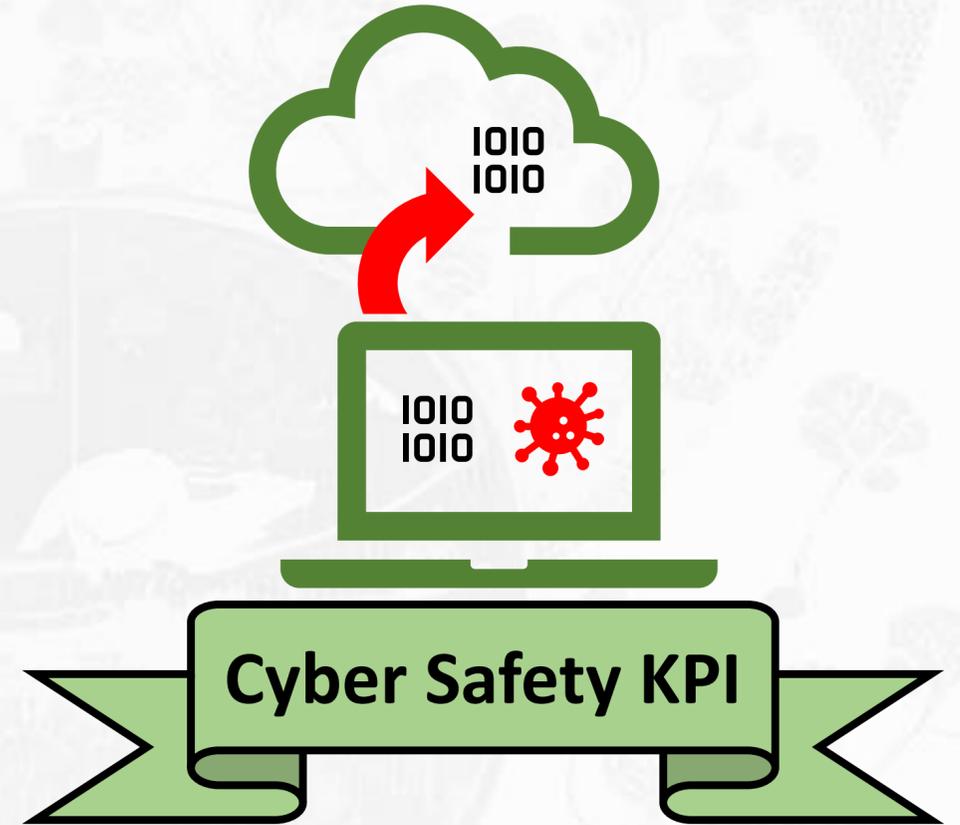
Focus Group

- Perception
- Attitude

Interviews & Survey

- Senior Management
- Non-Cyber Technical Specialist
- Non-Digital Worker

The Measure of Success Progress



Cyber KPI is recognised as a primary KPI and has financial implications.

The Measure of Success Progress



Seat Belt

Expected



Fire Extinguisher

Included



Safety Boots

Economical

**Cyber safeguards are included in
everyday processes.**

The Measure of Success Progress



Cyber responsibilities are distributed and maturity is organic in nature.

**Building a
people-led
security
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The Measure of Success Progress



**Cyber is nowhere but also
Everything Everywhere All at Once.**

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CISO Perth 2023



Joshua Qwek
Cybersecurity Architect



Joshua Q

1

The Golden Age of Cyber Awareness

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The Measure of Success Progress