



**HumanFirewall<sup>®</sup>**  
EMPLOYEE POWERED INFORMATION SECURITY

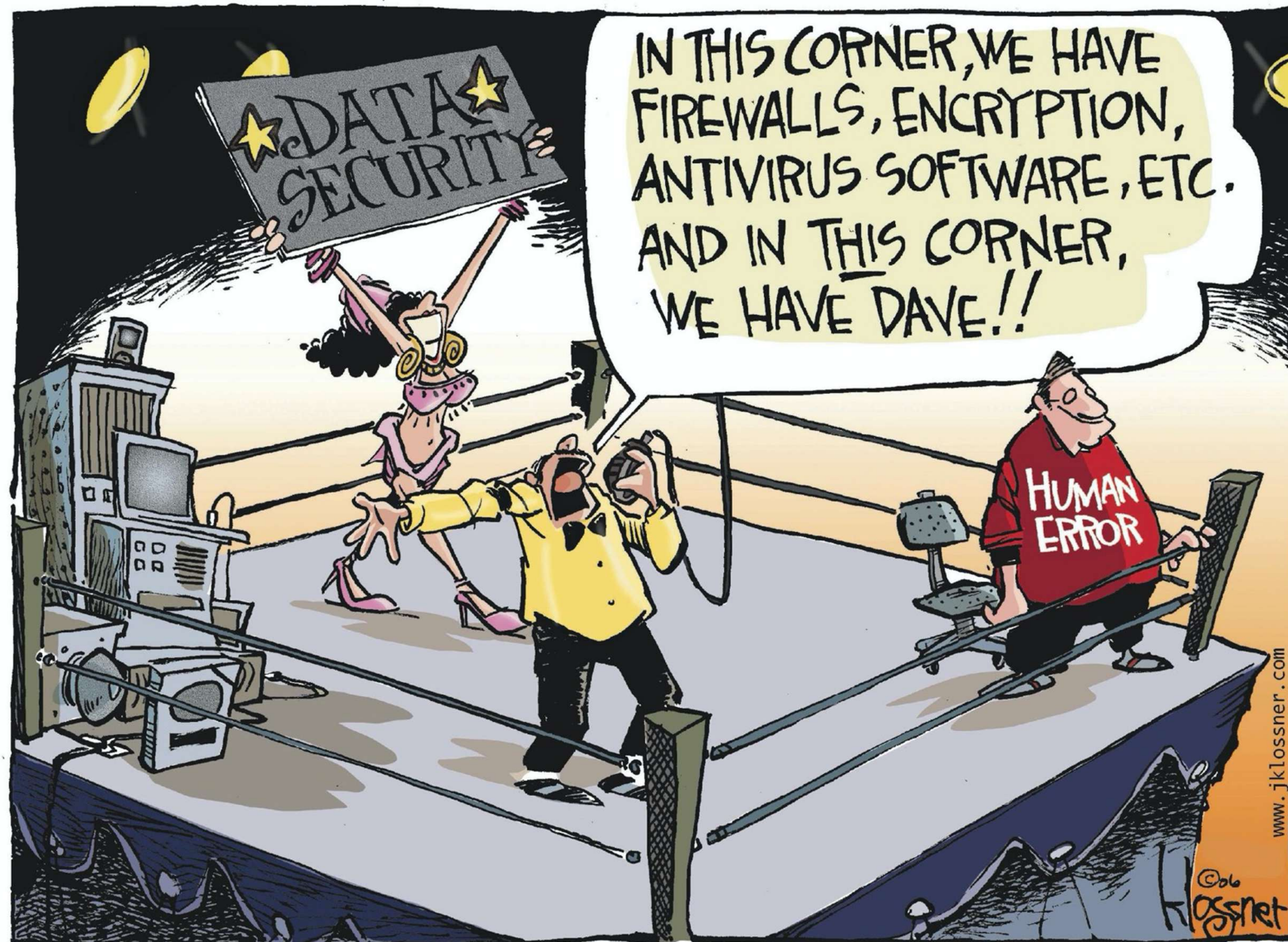


# INDEX

1. PROBLEM STATEMENT
2. WHAT THEY ASK FOR VS WHAT THEY REALLY WANT?
3. THE SOLUTION: JOURNEY FROM A TO B
4. PILLAR 1: PSYCHOLOGY
5. PILLAR 2: REPORTING
6. PILLAR 3: REMEDIATION
7. PILLAR 4: ORCHESTRATION
8. PILLAR 5: FEDERATION
9. Q&A



# HUMANS: THE WEAKEST LINK IN CYBER SECURITY





# Security awareness training



But is it a 'complete' solution?



What they Ask For?

**Vs**

What they really want?

**PARENTS**

Send the child to a good  
school

**Vs**

Success & Happiness  
for their child

**CISOs**

Security awareness &  
Training

**Vs**

Security when real  
attacks happen!

# JOURNEY FROM A TO B: KEEP IT SIMPLE

6

ONE HUMAN CAN  
**CAUSE** A BREACH

ONE HUMAN CAN  
**PROTECT**

↑  
**A**  
PROBLEM



↑  
**B**  
SOLUTION

# Testimonial: Reality Check

*In Month 4 of this program, we upped our 'Human Information Security Preparedness' score to over 94%!*

*Every time we get a real attack now is an opportunity for us to train our staff. I'm not afraid of real attacks - bring them on!*

*It's a game, **it always was**, but **I am driving it now**, and not the hackers!*

- CISO, MAJOR GLOBAL CORPORATION



# 5 STEP PROCESS





# THE FIVE PILLARS OF HUMANFIREWALL

9



## PSYCHOLOGY

Alter the psychology of users and train them on 'How to identify phishing attacks?', no matter what type of attack.

**MAKE USERS  
SUSPICIOUS BY  
NATURE.**



## REPORTING

Create a 'Culture of Reporting' such that one user is enabled to save the entire organisation.

**REPORT IT! DO  
NOTHING IS NOT AN  
OPTION.**



## REMEDIATION

Deep/Native integration into the core email services, such that attacks can be remediated in seconds

**MITIGATE IN REAL  
TIME**



## ORCHESTRATION

SOAR Capability: API based or STIX based broadcasting of the 'Indicators of Compromise' across the organisation's cyber platforms to ensure enterprise-wide protection.

**BROADCAST IOCS FOR  
ENTERPRISE WIDE  
PROTECTION**



## FEDERATION

Federate 'Indicators of Compromise' across all associated organisations and entities, to ensure that 'Bad actors' cannot try this across the sector.

**FEDERATED IOCS  
FROM ACROSS THE  
INDUSTRY**



There are over 20,000+ types of attack scenarios.

...How many can you train your people for?

It is impossible to train for all!

So what's the solution?

**Alter their psychology!**



HUMANFIREWALL STUDY: “What aspects of psychology do hackers leverage?”  
ANALYSED: Over 20,000 phishing incidents and their underlying scenarios

-----  
**RESULTS:** Here are the 7 aspects of psychology that are  
used by  
hackers in over 95.3% of all scenarios studied:

*Urgency*  
*Fear*  
*Greed*  
*Obedience*  
*Apathy*  
*Hubris*  
*Ignorance*

...

Make your users to be suspicious by nature!

**HumanFirewall**<sup>®</sup>  
EMPLOYEE POWERED INFORMATION SECURITY

# The Game called HumanFirewall

## 1. Campaign Zero:

Benchmarking and Baselining Event. Where we were before this game rolled out?

## 2. Leadership Announcement Email:

To declare the game open.

## 3. Reporter Rollout:

A button that will be installed in all outlooks to remove the friction from reporting. One click and done.

## 4. GAME BEGINS

Scenario 1: Day 1

Scenario 2: Day 23

Scenario 3: Day 49

Scenario 4: Day 55

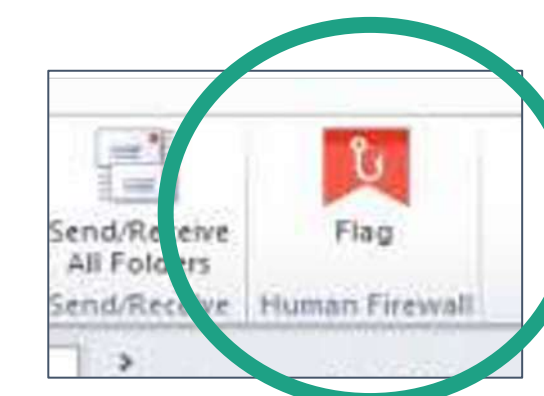
Scenario 5: Day 80

And so on...

*Completely random attacks...some after 20 days, some in under 7 days.*

*NO ONE WILL KNOW WHEN THIS IS A REAL ATTACK AND WHEN THESE  
ARE PART  
OF THE GAME!*

***ALL ONE HAS TO DO IS PRESS THE REPORTER BUTTON***





# LEADERSHIP EMAIL

The core messages that make **all the difference**

## 01

SET THE TONE

*Humans are the weakest link in Cyber Security. Over 90 % of breaches happen at the human layer. AT OUR ORGANISATION – **I WILL NOT TOLERATE US BEING PART OF THAT STATISTIC!***

## 02

AMBIGUITY

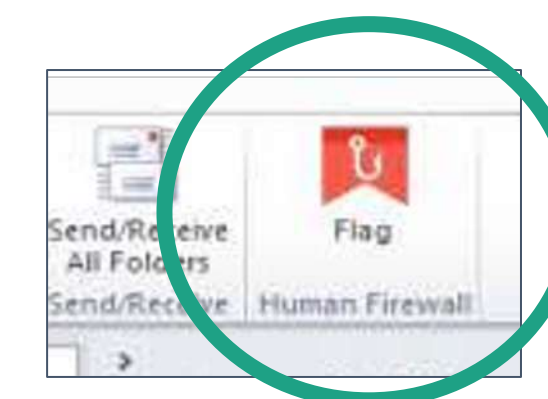
*I have authorised our CIO/CISO to carry out 'X' attacks per year, on you and me! The attacks can occur across Email, Phone, Whatsapp, FB, Office, Home... anywhere... anytime! **YOU AND I WON'T KNOW IF IT'S A REAL ATTACK OR A GAME BEING PLAYED BY THE THEM!***

## 03

HOW TO WIN

*So 'WHAT' do we do when we spot an attack?:  
**REPORT IT or GET COMPROMISED.**  
**BUT 'DO NOTHING' IS NOT AN OPTION FROM TODAY!***

**WHEN IN DOUBT – JUST PRESS THE EMERGENCY/SOS BUTTON INSTALLED IN YOUR OUTLOOK/OWA/GSUITE.**



# Security Awareness & Training

## The 3 generations!

### Spray & Pray!



Spray Emails, Put up posters, Do tedious classroom trainings etc.

PRAY that everyone will see them!

### Phishing Simulations Based Awareness & Training!



Big leap up! Measurable Reports.

Training is worth nothing if it can't help remediate in the event of a real attack!

All that training & measurement, but for what?!

### Gen 1 + Gen 2 + Remediation & Orchestration!



**HumanFirewall®**  
EMPLOYEE POWERED INFORMATION SECURITY

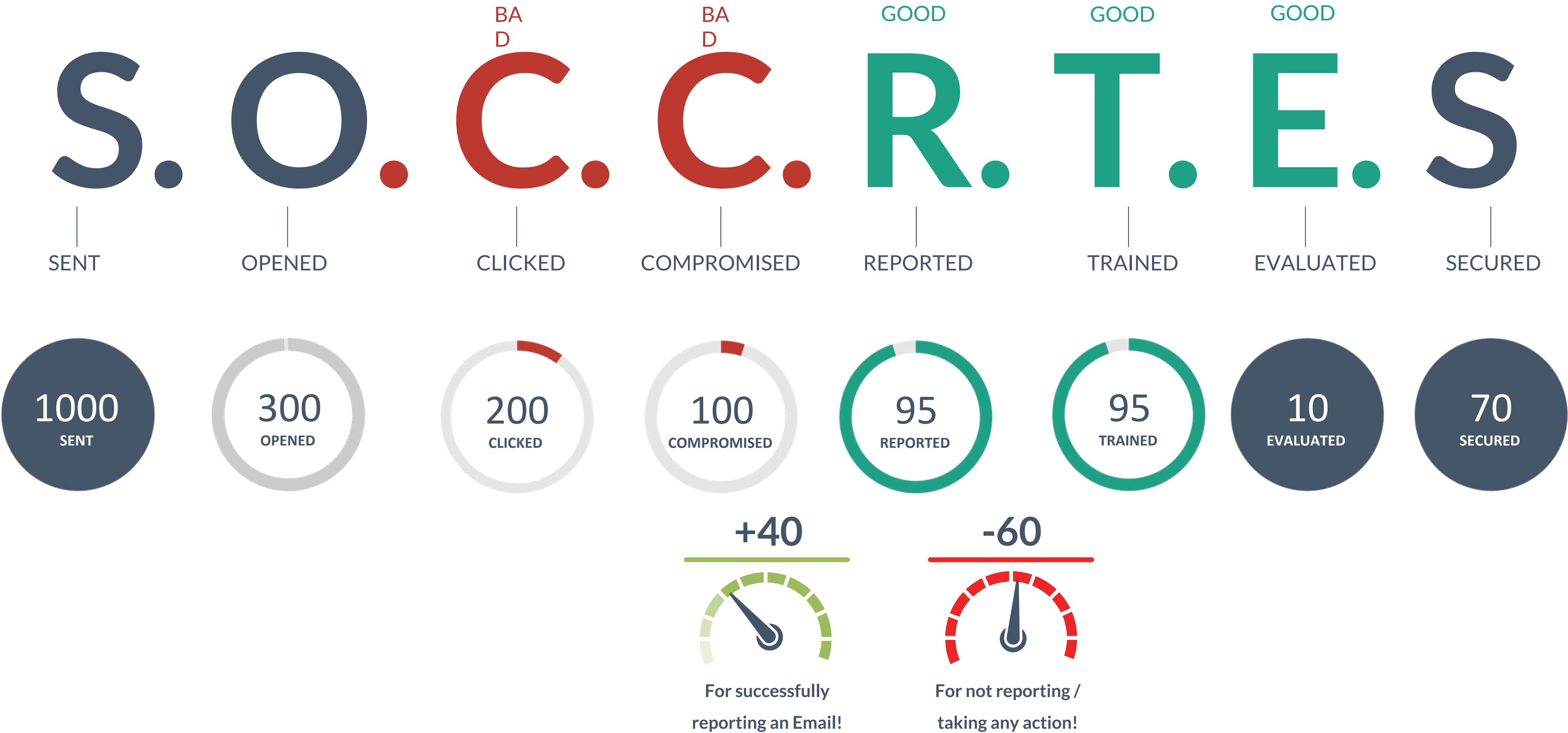
Armed with everything from Generation 1+2. Add a whole lot more automation + Learning Paths.  
Move away from a campaign based approach, to a personalised, individual based approach + Add Real time remediation!

AND NOW use all that rich information to REMEDIATE REAL ATTACKS & ORCHESTRATE - Manual or Machine Learning based.



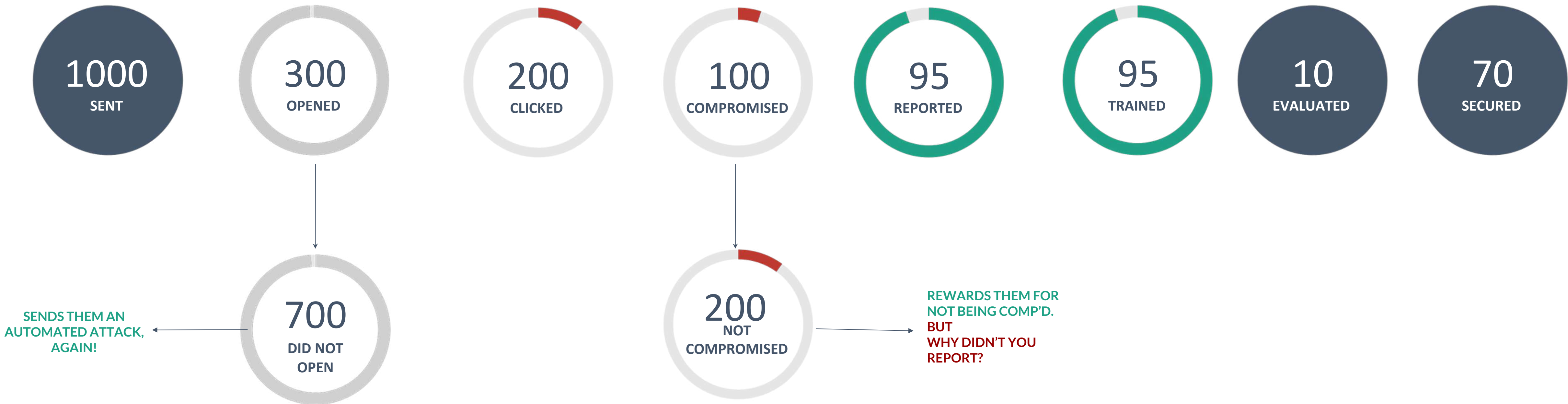
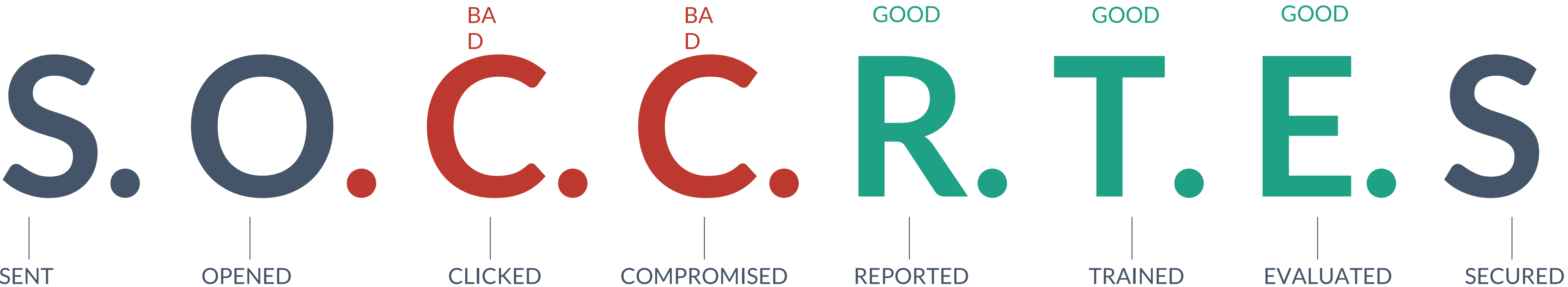
# THE UNIQUE SOCCRTES FRAMEWORK

*What you can measure, You can manage.*

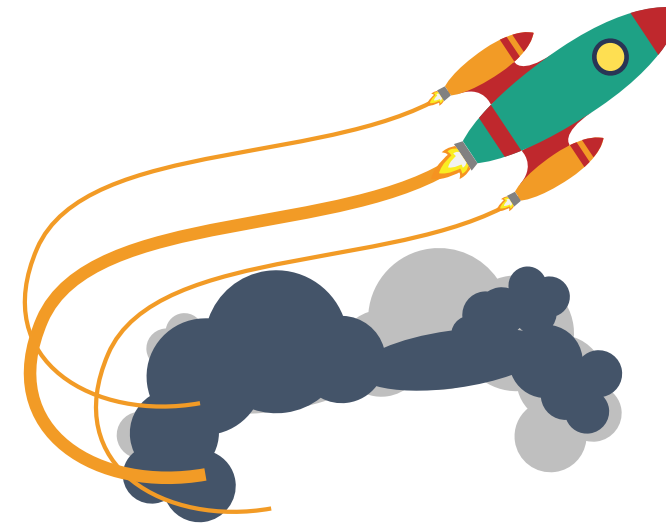


# HUMANFIREWALL IS INDIVIDUAL BASED

*What you can measure, You can manage.*







FOR THE FIRST TIME EVER  
GET THE TWO INDICES THAT MATTER THE MOST  
TO YOUR ORGANISATION

**HCSA.**

HUMAN CYBER SECURITY  
AWARENESS INDEX

&

**HISP.**

HUMAN INFORMATION SECURITY  
PREPAREDNESS INDEX

FOR THE FIRST TIME EVER – GET YOUR HUMAN CAPITAL'S ACTUAL SECURITY POSTURE

# HCSA. HUMAN CYBER SECURITY AWARENESS INDEX

## WHAT DOES IT MEAN FOR YOU?

1. Percentage level of 'Training': How many have completed how many training modules?
2. Champions Vs Weakest Links: Who are the fastest and most accurate reporters, and who are the weakest links, the 'repeat clickers'?
3. What are the weakest areas of cyber security training, and thus require specific attention?
4. Status of Old Vs New Staff: Have the new employees caught up in training with the old ones?

++ SEVERAL OTHER MEASURABLE METRICS ++

**TAKE THE GUESSWORK OUT, AND SHOW YOUR BOARD THE REAL SITUATION.**

## HOW?

1. Automated Onboarding via integration with AD/G Suite/O365/Lotus/Zimbra/LDAP/etc.
2. Automated 'Learning Path' completion and Accelerated mode for new staff, whenever they may join.



FOR THE FIRST TIME EVER – SEE HOW FAST YOUR EMPLOYEES PICK UP ON THE ATTACK

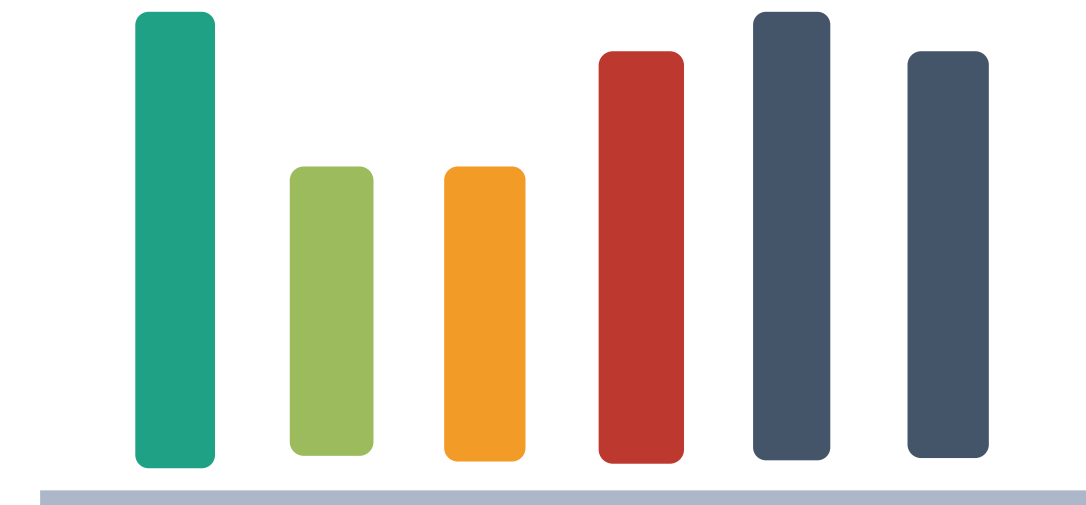
# HISP.

HUMAN INFORMATION SECURITY PREPAREDNESS INDEX

WHAT DOES IT MEAN FOR YOU?

1. Percentage of people who 'REPORT'?
2. Percentage of people who tend to get 'Compromised' or 'Lured'?
3. Time to 'Report'
4. Time to 'Remediate'

++ SEVERAL OTHER MEASURABLE METRICS ++



TAKE THE GUESSWORK OUT, AND SEE HOW YOU WOULD FARE IN A REAL ATTACK.

# HUMANFIREWALL: POSITIVE FEEDBACK LOOP

The more people we train, the more they report, the more protection is achieved



Real attacks are welcome because they help train the people + the platform!



# Remediation

Taking action on Reporter Emails, Simplified.



**EmailRemediator™** allows the administrator to take actions on all reported emails like Labelling, Quarantining and Deleting it across all inboxes in seconds!



**Simplified Threat Intel:** EmailRemediator™ dashboard automatically shows threat intel like hidden links, attachments, SPF, DKIM & DMARC status, Spam Scores and IP reputations on all reported emails, making it simple for the administrator to judge the authenticity of an email!

## Threat Email Reported

Reported Email will reach the EmailRemediator Dashboard in real-time with an optional personalised message from the user.

## Org - Wide Search for Same Email

The administrator can search all mailboxes for the recipients of the same Email / Potential Threat.



**EmailRemediator.**

Now

5 Sec

10 Sec

30 Sec

## Check for Red Flags

The administrator will check for red flags in the email through the Threat Intel provided on the dashboard.

## Quarantine/Delete Email for all!

Threat mitigated! Administrator can take any action on that email in just 2 clicks!

# Email Remediator – Demo (VIDEO)

22

The screenshot displays the EmailRemediator.com web application. The browser address bar shows the URL [https://demo.emailremediator.com/reported\\_mails](https://demo.emailremediator.com/reported_mails). The page header includes the site name "EmailRemediator.com", a "Select Domain" dropdown menu set to "gethumanfirewall.com", and a user profile for "Admin User".

A left-hand sidebar contains navigation options: "D", "R", "S", "U", "S" (likely for Domain, Report, Status, User, and Settings), and a list of actions: "Action Required", "Labelled", "Quarantined", "Trashed", "Archived", "Deleted", "Reinstate Requested", "Reinstate Accepted", "Reinstate Rejected", and "All Reported".

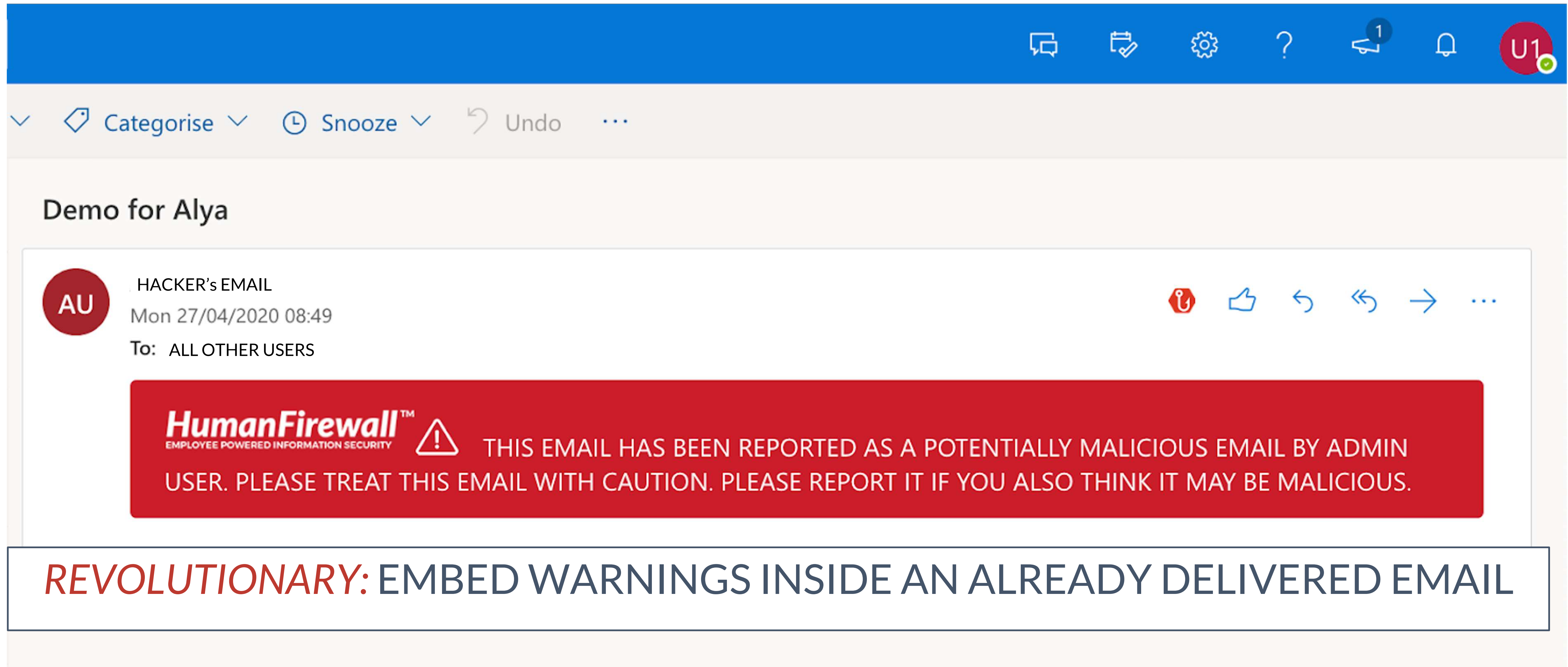
The main content area lists three reported emails:

- Reporter:** admin@gethumanfirewall.com + 1  
**From:** Admin User <admin@gethumanfirewall.com>  
**To:** <Admin User <admin@gethumanfirewall.com>>  
**Delivered At:** 12 May 2019, 20:07:08  
**Subject:** DEMO PHISHING ATTACK  
**Latest Reported At:** 12 May 2019, 20:07:38  
10 sec(s) ago
- Reporter:** u1@gethumanfirewall.com  
**From:** Admin User <admin@gethumanfirewall.com>  
**To:** <U 1 <u1@gethumanfirewall.com>>  
**Delivered At:** 10 May 2019, 06:40:47  
**Subject:** test  
**Latest Reported At:** 10 May 2019, 06:41:23  
2 day(s) ago
- Reporter:** admin@gethumanfirewall.com  
**From:** Admin User <admin@gethumanfirewall.com>  
**To:** <Admin User <admin@gethumanfirewall.com>>  
**Delivered At:** 02 May 2019, 11:31:18  
**Subject:** DEMO FOR QATAR COOL  
**Latest Reported At:** 08 May 2019, 10:56:56  
4 day(s) ago

The right side of the interface features a large, light gray area with the text "No email has been selected".



ALL OTHER RECIPIENTS GET  
AN ALERT EMBEDDED IN REAL TIME





# MAN + MACHINE

## Presenting the 'Email Security Assistant'

*Augment with  
technology,  
What humans  
lack in  
attention*



**HumanFirewall®**  
EMPLOYEE POWERED INFORMATION SECURITY





# MAN + MACHINE

## Presenting the 'Email Security Assistant'



YOUR  
LOGO  
HERE

CAUTION: FIRST TIME EMAIL - This email address has written to you for the first time ever.  
Please deal with caution



YOUR  
LOGO  
HERE

CAUTION: SIMILAR NAME – <NAME OF SENDER> has never sent you messages using this email address.  
Avoid replying to this email unless you reach out to the sender by other means to ensure that this email address is legitimate.



YOUR  
LOGO  
HERE

CAUTION: LOOKALIKE DOMAIN - This sender's email domain has likeness to our own domain(s).  
THIS IS AN EXTERNAL EMAIL. Please deal with caution.

**REVOLUTIONARY:** EMBED WARNINGS INSIDE AN ALREADY DELIVERED EMAIL



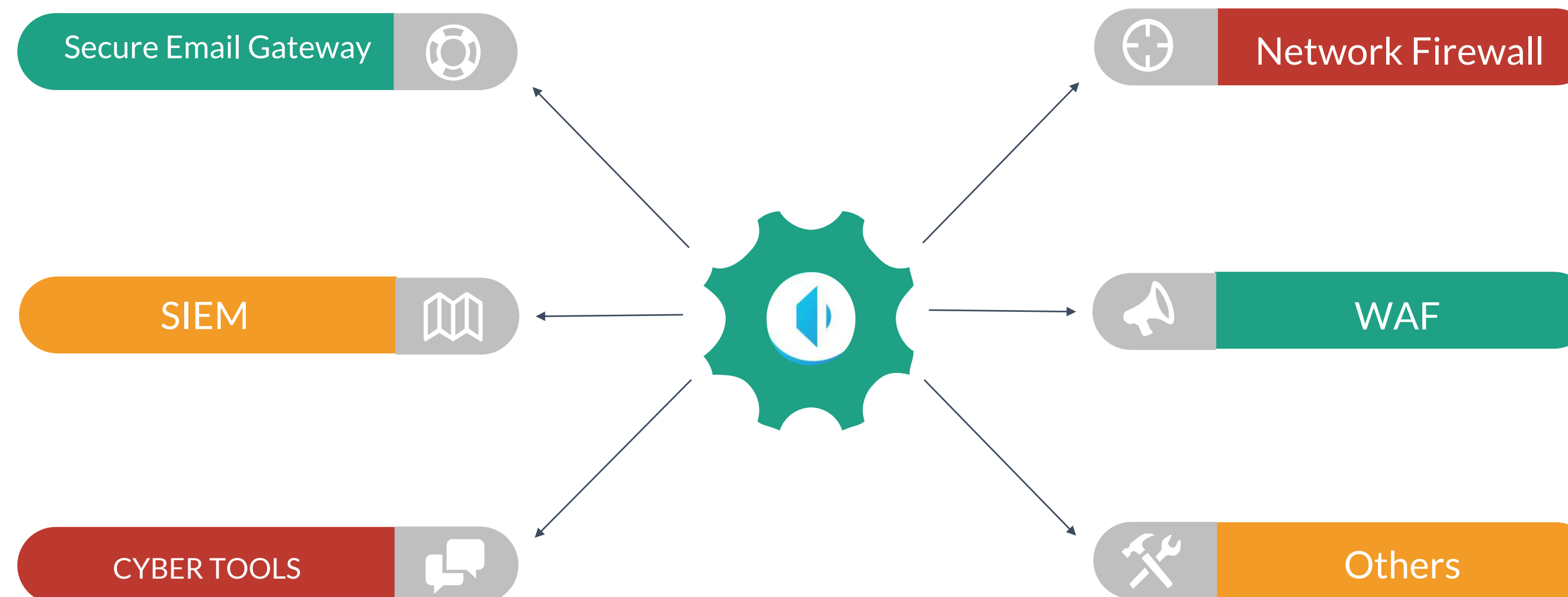
# Orchestration

Broadcast Threat Intel to all other Cybersecurity Investments

26

Ensure a 360 degree protection.

SOAR Capability: API or STIX based broadcasting of “Indicators of Compromise” like IP addresses, URLs, Emails and more, to all other cyber products at your organisation!



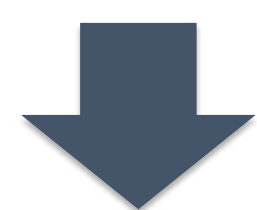


# THE SIX MODULES

**T. P.**

TRAIN

PROFILE



**HCSEA.**

HUMAN CYBER SECURITY  
AWARENESS INDEX

**R. R. E. O.**

REPORT

REMEDiate

ESA

ORCHESTRATE



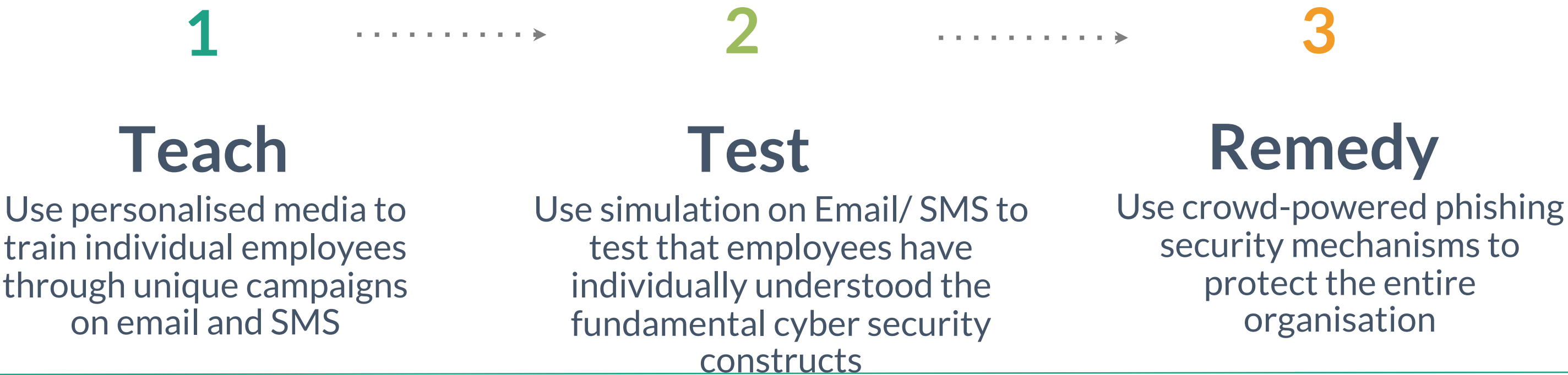
**HISP.**

HUMAN INFORMATION SECURITY  
PREPAREDNESS INDEX

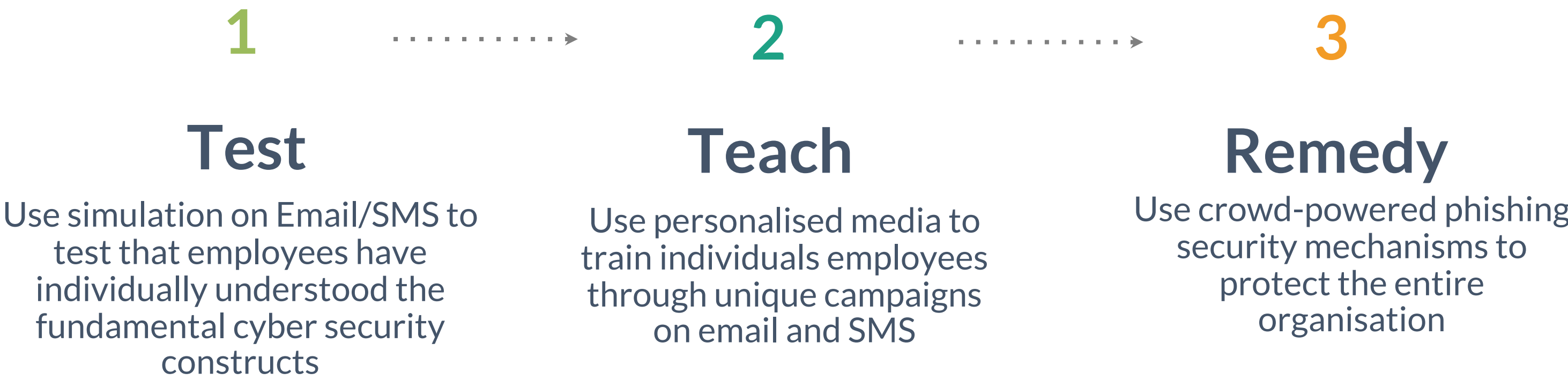
# The difference between school and life?

*“In school, you're taught a lesson and then given a test.  
In life, you're given a test that teaches you a lesson.”*

## SCHOOL APPROACH



## LIFE APPROACH



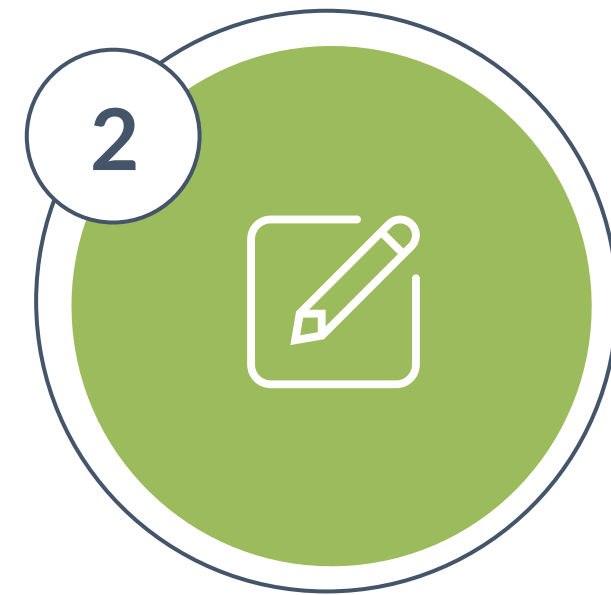
# DIFFERENTIATORS

WHY HF IS THE PLATFORM OF CHOICE?

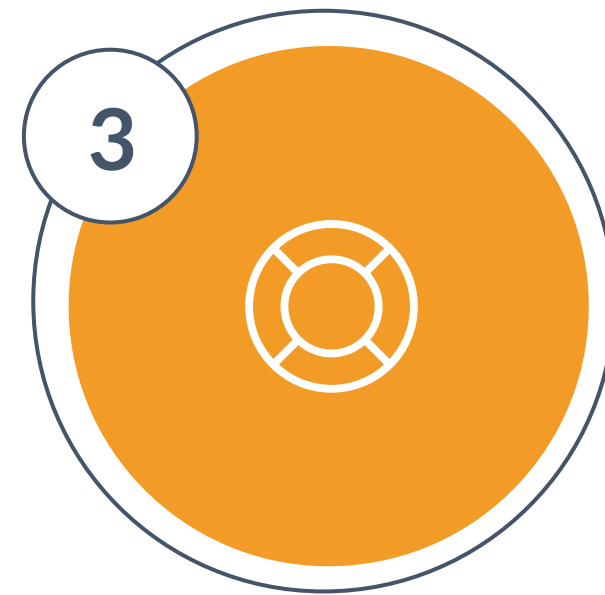


**ON-PREMISE  
OR CLOUD**

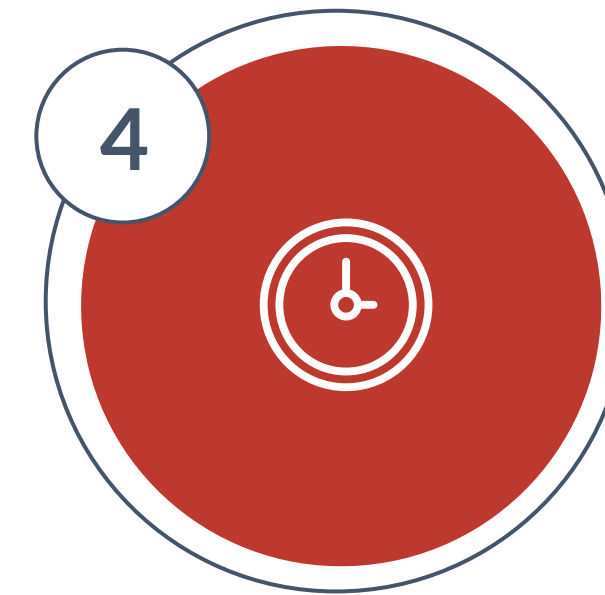
**AVAILABLE AS A  
MANAGED SERVICE**



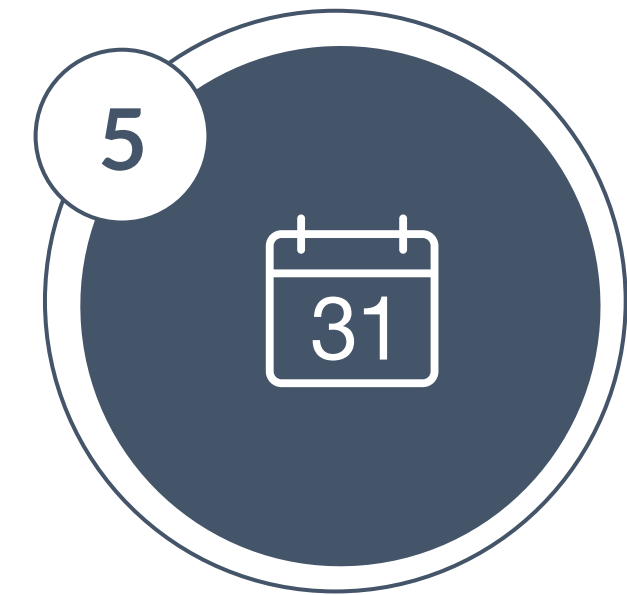
**INDIVIDUAL  
BASED**



**FULLY  
GAMIFIED**



**MULTI  
LINGUAL  
CONTENT**



**REAL TIME  
PEOPLE POWERED  
SECURITY  
END TO END**



# THANK YOU



**HumanFirewall**<sup>®</sup>  
EMPLOYEE POWERED INFORMATION SECURITY

[Hello@InfosecVentures.com](mailto:Hello@InfosecVentures.com)

+44 207 993 0067