

Phishing Assessment Optimizer™

Make sure you're getting value and not wasting time!



From: babongarcon@extortionsrus.com
To: Fred Hellaskison <fred.hellaskison@swagatech.com>
Date: November 14, 2016
Subject: Your account with Ashley Madison

Hello,

Your data was leaked in the recent hack of the Ashley Madison website, and I have evidence of your infidelity, which will be released to your family and employees if you do not pay me 10 bitcoin.

Please click [here](#) to view the evidence.

Once you have verified my evidence, please pay my fee.

Thanks,

B. A. Bongarcon



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Why do you need this Phishing Assessment Optimizer?

Having delivered “security awareness training” and “phishing assessments” for many years, I found that there were numerous variables and potential pitfalls that could cause adverse outcomes for an awareness program, and for the employees in an organization.

*I designed the “**Phishing Assessment Optimizer**” as a tool to help IT and Security Managers anticipate and address these pitfalls before they happen when you are using live, “mock phishing exercises”.*

*If you aren’t avoiding these issues, you might only have “**Security Theater**”, because sometimes management just wants “click rates” no matter how they were generated. This is not helping your organization become secure.*

No organization can afford to waste time and money on bad assessments.



Scott Wright, CISA
CEO and Founder
Click Armor

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Table of Contents

Phishing Assessment Pitfalls	Page
1. Unpredictable employee actions	4
2. Impossibly difficult test messages	5
3. Embarrassing your employees	6
4. Employee confidentiality risks	7
5. Employee targeting backlash	8
6. Uncooperative spam filters	9
7. Spurious message difficulty	10
8. Forbidden Hot Button Impersonations	11
9. Curious and rebellious employees	12
10. Lack of handling guidelines	13
11. Easily spotted tests	14



Pitfall #1: Unpredictable employee actions



OMG! Wait until
Twitter hears about
this...

Do you have a plan for unexpected end-user actions?

- Unlike “**technical penetration tests**” that have “***terms of engagement***”, a “**human vulnerability test**” of any kind can have unexpected results
- Discuss expected and “**potential**” results of each test message, and the **risks**, with management



Pitfall #2: Impossibly difficult test messages

This one's perfect.
They'll all fall for it...!

- The point is NOT to prove you're smarter than employees or shame them. This can easily backfire.
- While it's not easy, always **leave fair clues** you can point to for learning in live tests.



Are you having too much fun
tricking users?



Pitfall #3: Embarrassing your employees - “The boss clicked on WHAT???”

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- Think about the possible actions and consequences for employees
- Avoid controversial subjects that could put employees in a difficult position in live tests

Are your emails too leading?



Pitfall #4: Employee confidentiality risks



Did you hear? Amy clicked on links in the last 3 phishing tests. She might be fired!

- The raw data results of live phishing tests are sensitive
- Treat them as Personally Identifiable Information (PII)

Do you have access and need-to-know restrictions on results?



Pitfall #5: Employee targeting backlash



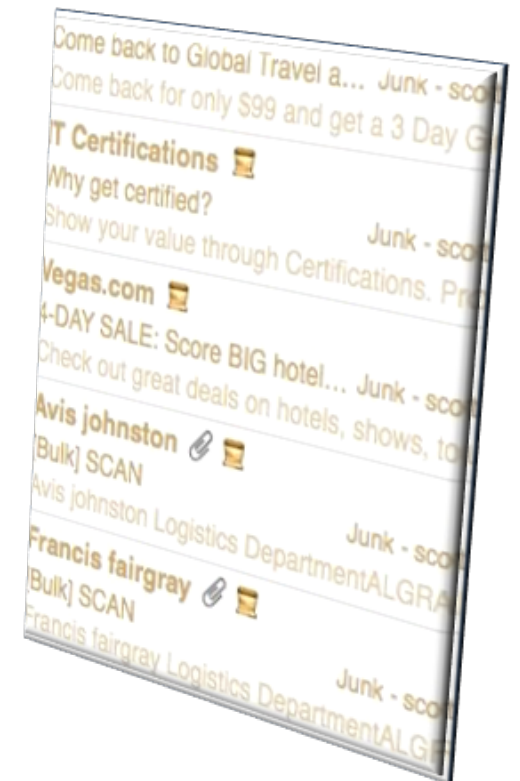
- Employees can be sensitive to unfair victimization in live tests (and may launch grievances?)
- *Get **HR and Legal** involved early (GULP!)*

Are you doing damage to the corporate culture?



Pitfall #6: Unpredictable spam filters and settings

- If they don't see the message, what level of precision in results is meaningful?
- Spam traps and "image preview settings" can skew results
- White-list the email sending domain/IP's
- Run some small live tests
- Some normalization techniques may help (but normalization that only compensates based on "open rates" can also be skewed)
- Put disclaimers on baseline and trend data regarding variables like these

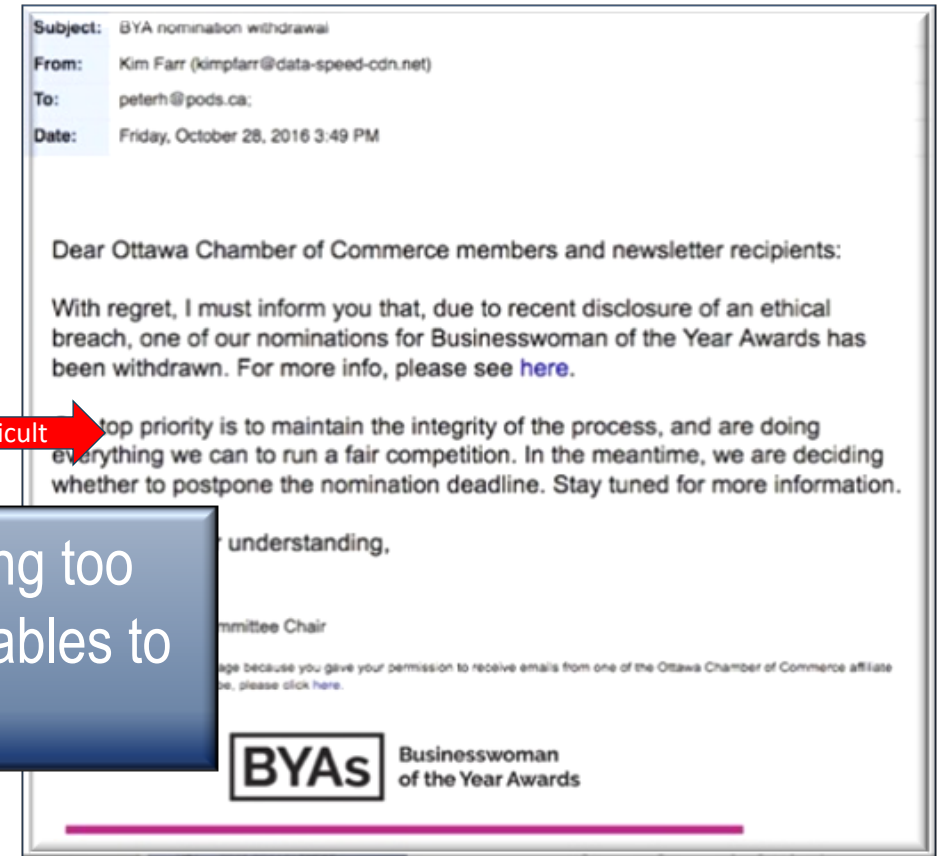
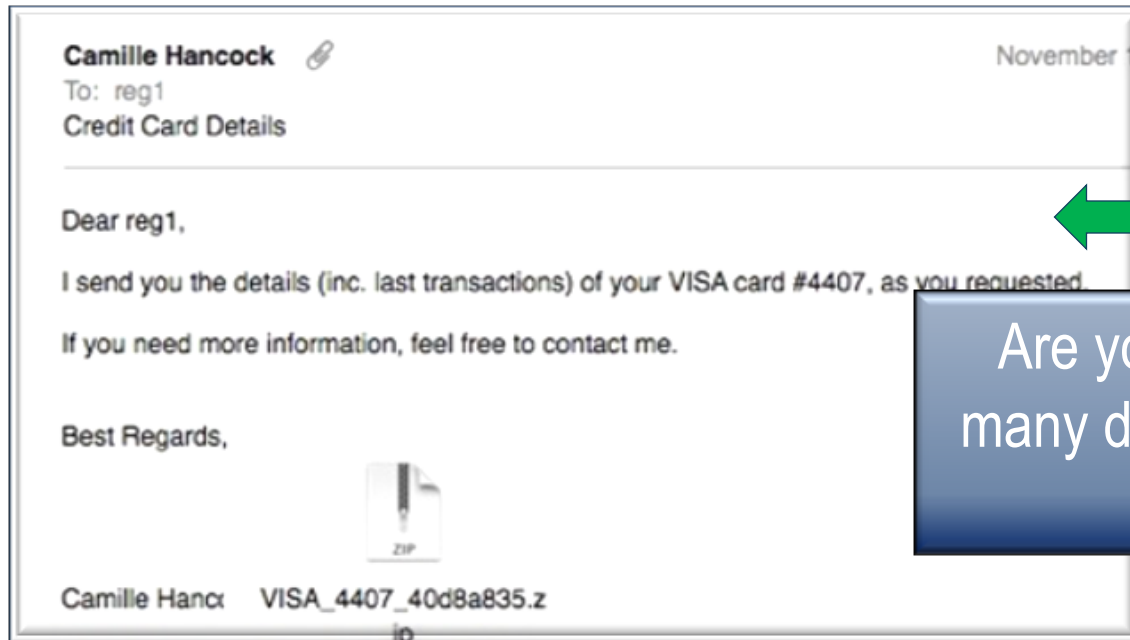


Are your results getting skewed by filters and settings?



Pitfall #7: Too many variables in difficulty of test messages

- Trends can be hard to track if you vary the difficulty of live tests too much
- Management might push for more difficulty
- Keep the difficulty **consistent** for usable data



← Easy

Difficult →

Are you introducing too many difficulty variables to your data?



Pitfall #8: Forbidden “Hot Button” impersonations

- ***Hot-button impersonations*** are roles in the organization that are “*too sensitive to simulate*” in live campaigns
- Attackers can guess or learn where they are, making campaigns less effective
- Try to make them “in-scope”, or else recognize that the **scope of testing can be significantly limited**

What areas can't be tested that attackers will target?

OK. These areas are “off-limits”...

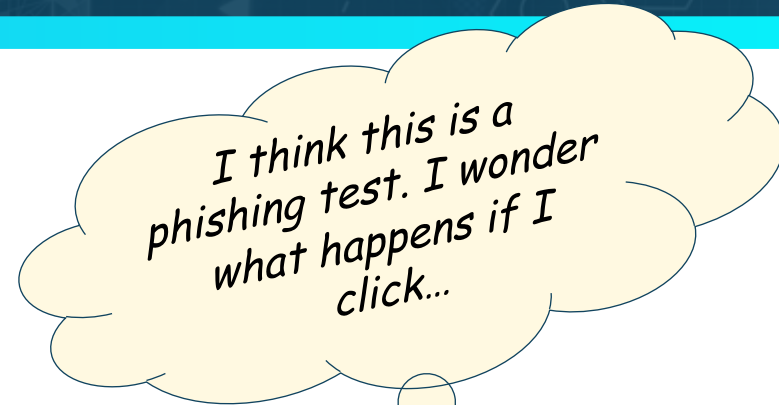
...*payroll, helpdesk, executives*...



Pitfall #9: Curious and rebellious employees

- Keeping summary results secret can lead to **more clicks**
 - *And will “clickers” send out warnings?*
- **Communicate aggregate results soon** after live tests, before they get restless

Are people clicking intentionally?



Pitfall #10: Lack of handling guidelines

Clues to spotting suspicious email messages, and what to do with a suspicious message:

1. The message requests personal information by reply, or by entry into a form
2. The message requests that the recipient take urgent action.
3. The message contains simple grammar and spelling errors; or may contain wordings that are not commonly used
4. The message contains offers or describes situations that are too good to be true.
5. The message contains improper links that don't match the organization being represented.
6. The message is sent from a free webmail account that doesn't match the organization being represented.
7. Use the "phish hook" tool in your email client to report suspected phishing messages.
8. No need to report spam that is clearly not legitimate. Just delete it.

Have you taught people the basics, so there are fair expectations of what they should do?



Pitfall #11: Easily spotted tests (no need for people to analyze)

- If one test is good, more of them is better... right? (*Not necessarily*)
 - More “variable” data is *NOT* good.
- More frequent tests can become **adversarial... and predictable.**

Not
again!



Don't they know *we*
can spot these a mile
away?

Are people getting used to your testing patterns and easy clues that it's a test?



Phishing Assessment Pitfalls

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And (#12) what do those who “don’t click” actually learn?



Teachable Moments?

Vulnerability Metrics?

Business Productivity?

Cultural Repurcussions?

Is “live phishing simulation” really the answer?

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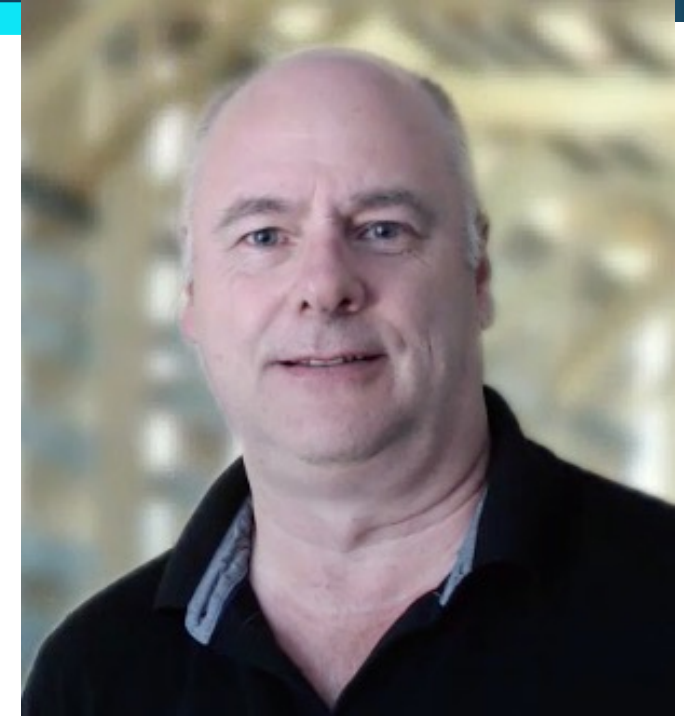
Reflecting on how to get better results...

When you consider how your effort spent in trying to avoid many of these undesirable outcomes is really making it hard to get the results you want, you can't help but wonder...

Isn't there a better way to measure vulnerability and teach employees not to click on dangerous links?

This is exactly what I was thinking a few years ago, and that's why I designed Click Armor to be a more positive, more consistent environment for doing all of this, all within in an easier process.

In fact, Click Armor provides a fully gamified platform that can be used to test and improve employees' resistance to **ANY** kind of threat. Why not book a call, get a demo, and benefit from the insights I've learned the hard way.



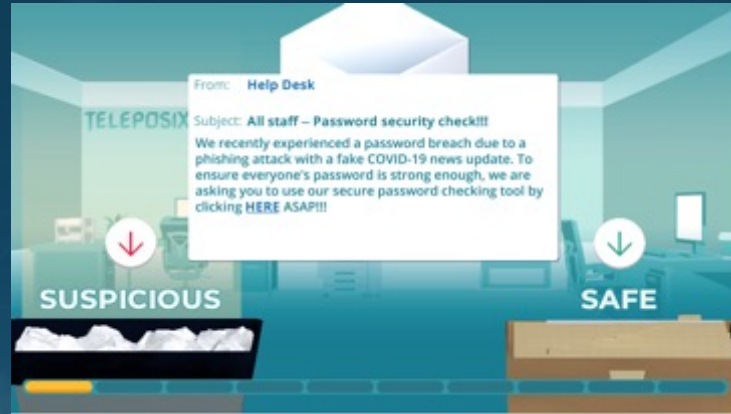
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What about the benefits of “Gamified Learning and Assessment?”

- 1. Engagement is a positive experience**
- 2. Interactive challenges reinforce knowledge**
- 3. Scoring and leaderboards drive practice**
- 4. Gamified simulations develop skills**
- 5. Relevant assessments provide rich data**





Try our 3-minute self-assessment at:
<http://canibephished.com>

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Level up from “live phishing tests” to “Gamified Learning & Simulations”

1. More engaging
2. Less firewall/gateway hassle
3. More testing scope
4. More culture-friendly
5. More consistent
6. More versatile
7. *Much more useful data!*



Want to know more about
Gamified Phishing Assessments?

[Book a Demo](#)

