Using Frequent Clickers to Strengthen Your Phishing Awareness Program

Mark Alexander and Heather Smee - Westfield



Mark Alexander, Security Education & Awareness



Mark has worked for Westfield for 3 years promoting information security education and awareness activities. He has conducted phishing exercises for Westfield for the last 2 years and has implemented a phishing outreach program for frequent clickers. Prior to his engagement with Westfield, Mark worked as an Instructional Technologist with Indiana University in Indianapolis.

Heather Smee, Information Security Governance, Risk, & Compliance Leader, CISSP, AINS

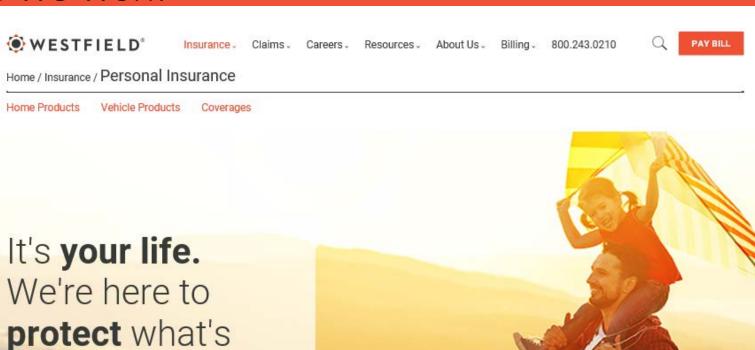


Heather Smee is an Information Security Professional with 17 years of experience in the Insurance Industry. In 2011 she joined the Information Security team and since 2016 she has been managing the information security governance and compliance function for the organization.

Areas of focus include security education and awareness, regulatory compliance, development and execution of the vendor security program, policy and standard stewardship, and access management governance.



Where We Work



yours.

Insurance shouldn't feel like rocket science. We make the complex simple.

Enter Zip Code

FIND AN AGENT

Our History



Our Story

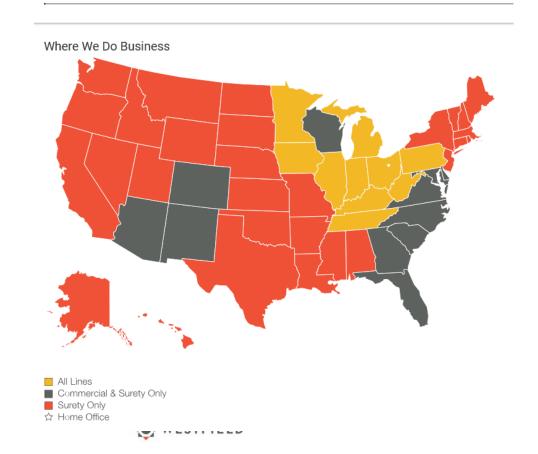
- Established in 1848
- 2,600 Employees
 - Home Office = 1,600
 - P&C in 21 states
 - Surety business in all 50 states





Where We Do Business

Home / About Us / Company



Our Golf Course



Our Culture



Insurance Claims Careers Resources About Us Billing 800.243.0210

PAY BILL

Home / Careers / Why Westfield

why westfield



The insurance industry is incredibly multi-faceted. It challenges you every day to know the ins and outs of the business, understand your clients' needs and navigate the best course of action. People's livelihood is in your hands.

When you work at Westfield, you'll be inspired to learn new skills, show your strengths and grow in your career. And we give you what you need to thrive, offering competitive compensation and onsite training and development programs to help you develop the career you've always dreamed of.

Build your future...while protecting theirs.

A Relationship-Oriented Company

Our success is a direct result of great relationships -- within our walls, with our agents and customers. As we move forward, we recognize those relationships are paramount to our longevity. The fact is, there are many ways to evolve a company, but at Westfield, there's only one way - together.



Back to Reality!

Time since last click on a phishing link

0d:2h:41m:38s



Record

7d: 22h: 34m: 54s



Westfield Starts Phishing Exercises

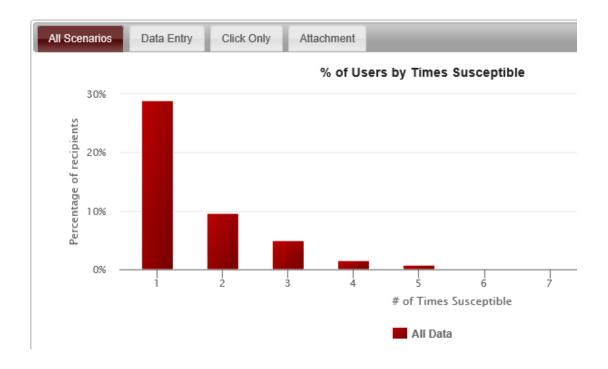
2017 CLICK RATE IN REVIEW

Scenario	Click Rate
January	20.6%
February	11.6%
March	8.9%
April	2.6%
May	5.4%
June	6.0%
July	12.4%
August	8.2%
September	5.7%
October	28.2%
November	0.9%
December	3.32%





The Repeated Click Rate Went Down Quickly



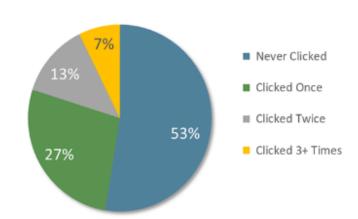
....but then we looked a little bit harder.



2017 Results

DIGGING INTO THE DATA

At Westfield 53% of people tested never clicked on a phishing simulation but 7% of individuals were found susceptible in 3 or more simulations.



....and we looked a little bit harder.







Frequent Clickers

Name		Clicked
Vendor X	January	X
	January 2	X
	February	X
	February 2	X
	March	X
	March 2	X
	April	X

.... and it just kept going and going.....



We Were Faced With Choices



We Needed To Consider Our Culture



Since 1848, a lot has changed. And a lot hasn't.

Before there were cars, electricity and television, Westfield was providing insurance protection and serving customers, achieving a level of trust and respect that remains the hallmark of how we conduct our business today.

Westfield has always been a relationship company, sharing what our employees and agents know to help customers protect the things they care about most. Our business relies on the strength of our relationships as much today as it did in 1848, when a small group of community leaders formed an insurance company to protect the property of local farmers. Our success is achieved because we believe in the ability of real people, who possess specialized knowledge, to create real value for our customers.

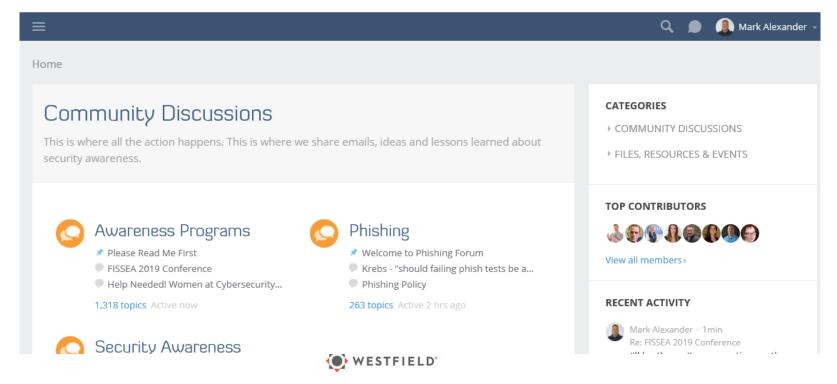
We Asked Ourselves...



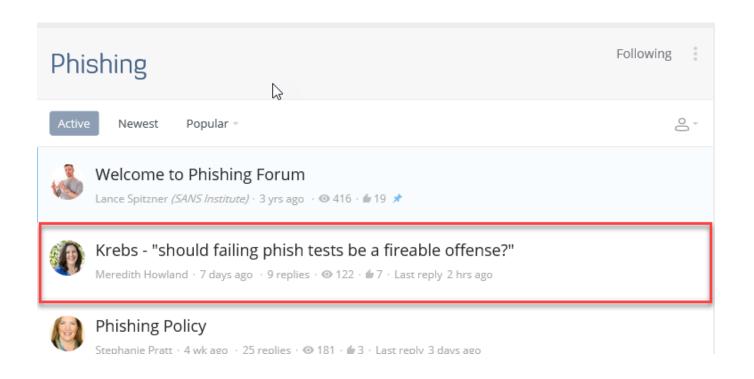
Not Knowing Where To Go...



Super Friendly Community



Research, Research, Research....





Research, Research, Research....

The most significant learning happens at the 4th response!

Gather feedback on your training program, you may be shocked by what you hear.



@Aaron Hurt and @Lushin Premji are either of you familiar with the learning curve for phishing training? Specifically, studies are showing that the most significant learning happens at the 4th response, usually after the 3rd time responding to a training email, repeat response drops to nearly less than 1% in most cases. This is also something I can attest to in my own experiences.

Additionally, I would highly caution the approach of "disciplinary" action on users. It is a training program. If your child was having difficulty in school - would you immediately assign them more training if they were having difficulty grasping a concept? No, you would likely sit down with them and find out where the knowledge gap is.

I can't stress enough that applying any additional "training" prior to allowing the user to learn, will most times create negative feelings towards both your program (security awareness, which we here are all very sensitive about) and your department (information security).

An approach I've had major success with (at The Walt Disney Company, Sony Pictures, Activision Blizzard) is creating a Repeat Responder Outreach program. For those users that you feel the need to harass prior to their learning moment, you can track users who are repeat responders (note dropping terminology like offender/offense, its training, and they're simply responding to your training), and reach out to them positively.

Some examples could be reaching out to them to "gather feedback on the phishing training program". This puts you in the learning chair, and you may be shocked at what you'll learn from your users if you take a moment to listen to them. Ask them if they're familiar with the program, if they're familiar with how to spot emails, if they're familiar.



Research, Research, Research....

Additionally, I would highly caution the approach of "disciplinary" action on users. It is a training program. If your child was having difficulty in school - would you immediately assign them more training if they were having difficulty grasping a concept? No, you would likely sit down with them and find out where the knowledge gap is.

I can't stress enough that applying any additional "training" prior to allowing the user to learn, will most times create negative feelings towards both your program (security awareness, which we here are all very sensitive about) and your department (information security).



Collaboration with HR, Procurement & Legal

- Clicking on **3** phishing exercises during a 12 month time period will prompt enrollment in the Phishing Awareness Outreach Program consisting of a brief monthly inform designed to assist in detecting malicious emails.
- Clicking on 5 phishing exercises during a 12 month time period will result in a
 meeting with a member of the information security team to discuss the risk
 associated with phishing and steps that can be taken to help improve response
 to these exercises.
- Clicking on **7** phishing exercises during a 12 month time period will result in an escalation to the employee's leader with a request to discuss strategist for improvement in this area.



The Email



Tue 6/4/2019 4:26 PM InfoSec Awareness

Westfield Phishing Escalation: Enrollment in Phishing Awareness Outreach Program

To

Retention Policy 120 Day Retention - All Folders (4 months)

Expires 10/2/2019

Dear

Westfield views phishing as a serious threat to its information assets.

We've noticed that you have clicked on 3 emails containing suspicious links or attachments during the last 12 months of Westfield's phishing awareness campaign.

The last time you clicked on one of our exercises was during May of 2019 and prior to that you clicked on 2 other phishing attempts during July and November 2018. This type of behavior can infect your computer and our network with malware.

Please don't panic. This is not intended to be punitive. We want to assist you in identifying these threats and are including you in our Phishing Awareness Outreach Program which will provide brief monthly communications to help you recognize these threats. Please make sure to read these as they will help you identify Westfield's phishing exercises.

We also encourage you to attend one of Information Security monthly Phishing Awareness sessions that are held in both face-to-face and WebEx formats. Please consult the Information Security Awareness Calendar for available dates and times. If you prefer more personal attention please feel free to reach out to InfoSecAwareness@westfieldgrp.com to schedule a one-on-one consultation to help make improvements in this area. We will be happy to work with you.

The Phishing Escalation Process is as follows:

- · Clicking on 3 phishing exercises within a year will automatically subscribe you to the Phishing Awareness Outreach Program.
- Clicking on 5 phishing exercises within a year will result in a meeting with a member of the information security team to discuss the risk
 associated with phishing and steps that can be taken to help improve your response to these exercises.
- Clicking on 7 phishing exercises in a year will result in an escalation to your leader with a request to discuss strategies for improvement in this area.

To learn more about phishing, visit the <u>Information Security WeConnect Phishing Resources page</u> which includes examples of phishing emails, as well as informational resources that can be used to help identify malicious emails. Please feel free to respond back with any questions that you may have.

The Outreach Letter



To InfoSec Awareness

It's worthy of repeating so please pay attention:

Get ready as we are heading into a busy phishing season!

Holidays like Halloween, Thanksgiving, Christmas, Hanukkah, Easter and Saint Patrick's Day are popular times for criminals to launch phishing attacks. Scammers take advantage of the increased shopping and distractions to catch you off your guard.

Check out this example of a phishing simulation used last year resulting in a 28.18% click rate:



BOO! Someone you know has wished you a happy and spoooky | Lallasanam! | http://malwara.789greeting.com/ecards/ You've received a very special Hallasanam oCard from particular of Markenson (1999) (6:05 de./ 176/3866-13710-45-83-64-39-ee4535-c1048a/



The Fifth Click

Ven Invoice #0726188



O Nick Young <nyoung@vencompany.com>

O Helen Brown

Saturday 28 July 2018 at 10:27 p.m.

Show Details

I tried to reach you by phone but couldn't get through.

Please get back to me ASAP with payment status of the invoice below.







The Meeting

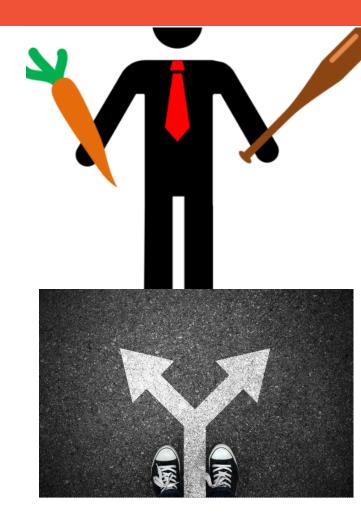


- In general it's OK to open it, we don't count it.
- Hover with your mouse to get a preview of the url.
- We provide clues in the email.
- Attachments are more difficult but we can analyze them for you.
- You need to slow down.



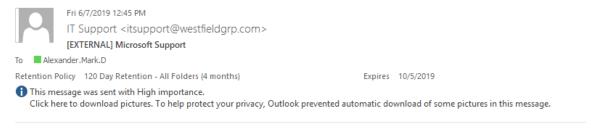
What We Know

- Since 1/2018 no one has clicked more than 5 times on phishing exercises.
- We have had about 12 interviews of people clicking more than 5 times.
- We work hard to establish good rapport with our clients.





May Phish No Interviewees Clicked



To: markalexander@westfieldgrp.com

Email Alert! Your entire emails are being forwarded from markalexander@westfieldgrp.com to a suspicious email: be*****@gmail.com with Signin details:

```
Country ?Region? ##COUNTRY##
IP .address? 23.31..54.18
Date: 5/27/2019
Platform? ##PC OS##
Browser? ##UNDETECTED##
                    http://itsupport.
                    dzisiejszebiezacewydarzenia.pl/noclick/
We presume this m 0ee9bd/
                                                       one else.
                    ab324c05-4c1f-4293-bdaf-5662a4741e8c/?
Please verify
                    test=1
                   Click or tap to follow link.
```

Check Mail Forwarding

Westfieldgrp.com IT Support One Park Circle P.O.Box 5001 Westfield Center, OH 44251



Uptick In Phishing Reporting

! ☆ □ 0 FROM	SUBJECT	RECEIVED ▼	SIZE	CATEGORIES	2
■ Date: Sunday					
Phishing	RE: [POTENTIAL PHISH]	Sun 6/9/2019 6:00 PM	6 KB		
<u>_</u> 0	[POTENTIAL PHISH]	Sun 6/9/2019 4:49 PM	43 KB	Phishing	~
▲ Date: Two Weeks Ago					
Phishing	RE: [POTENTIAL PHISH] Possible Westfield Insurance: VIN# WBAVD33506KV6827	Thu 5/30/2019 6:04 PM	6 KB		►
₽ 0	[POTENTIAL PHISH] Possible Westfield Insurance: VIN# WBAVD33506KV68276 (2	Thu 5/30/2019 5:40 PM	71 KB	Spam	~
▲ Date: Last Month					
	RE: [POTENTIAL PHISH] Setting up a call	Wed 5/15/2019 6:00 PM	6 KB		►
₽ 0	[POTENTIAL PHISH] Setting up a call	Wed 5/15/2019 2:24 PM	56 KB	Spam	~
▲ Date: Older					
	RE: [POTENTIAL PHISH] Hi	Mon 4/15/2019 2:01 PM	6 KB		
₽ 0	[POTENTIAL PHISH] Hi	Mon 4/15/2019 11:09 AM	48 KB	Spam	



What We Get Out Of It

Feedback on the program.

A better understanding of what people are having issues with in regards to identifying phish.

A sense of what is happening in people's daily lives (in regards to their inboxes).

An opportunity to gain trust.







There Are Small Personal Wins!



