## Phishing Detection and Response "You're gonna need a bigger boat"

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## The Problem

THAT'S SOME BAD HAT, HARRY - JAWS, 1975


CSO50

## Phishing Email Reports

"IT'S ONLY A HOAX" - JAWS, 1975



## "This looks suspicious"

"Anyone there?"
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Phishing Analysis

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## Phishing Analysis - By The Numbers

## MONTHLY SNAPSHOT

| 3863 | 427 | 79 | 15.2 Minutes |
| :---: | :---: | :---: | :---: |
| Total processed |  |  |  |
| emails |  |  |  |$\quad$| Total malicious |
| :---: |
| emails |$\quad$| Total escalated |
| :---: |
| emails |$\quad$| Average response |
| :---: |
| time |


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## Simulation \& Awareness Challenges

INEFFICIENT AND EXPENSIVE

$\left.$| Build our own |
| :---: | :---: |
| content |$\quad$| Manually |
| :---: |
| maintain user |
| list | \right\rvert\,



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## Simulation \& Awareness Enhancements

## EMPOWERMENT AND EFFECTIVENESS



Automated
user
maintenance

## Enhanced delivery tools

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## Simulation \& Awareness Response Time

 MINUTES TO FIRST REPORT VS MINUTES TO SIMULATION FAILURE
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## Employee Reported Emails Over Time

## MALICIOUS EMAILS AS CLASSIFIED, BY MONTH



- Business Email Compromise $\bullet$ Credential Phishing $\bullet$ Malware $\bullet$ Scam $\bullet$ Threat Removed $\bullet$ Threat Unavailable

A special thank you to everyone on the Messaging team and Cybersecurity team who dedicated time and effort to make this happen.


> On behalf of Penn Medicine, we THANK YOU for stopping by.

