WHITE PAPER / 2021

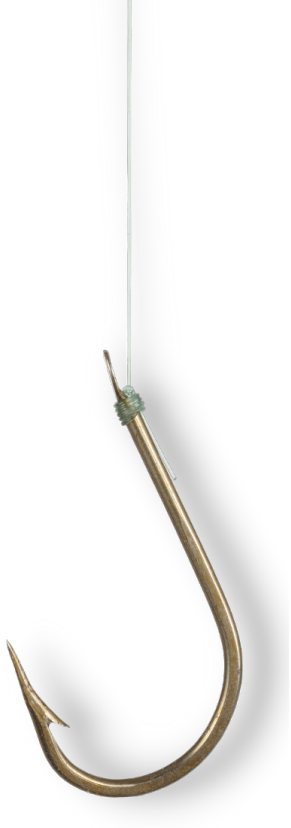
IT STARTED WITH A PHISH...

Busting common myths around mobile phishing

traced

the home of Trustd MTD

Why mobile is the best place to go phishing



Phishing is the most common type of cybersecurity breach

GOV.UK, Cyber Security breaches survey 2020

With employees increasingly relying on personal devices for work, mobile threats are no longer a danger to an individual device, but a danger to your business.

Mobile phones are often a gateway to multiple business systems including email, and numerous Cloud-based apps and services — as well as multiple personal messaging apps.

Those messaging apps make smartphones a prime target for phishing. And most mobile phishing attacks avoid email, so traditional email-based filtering can't stop them.

Lookout saw a 364% increase in the number of mobile phishing attempts in 2020 vs 2019, and research also shows that enterprise users are much more likely to fall for a phishing attack if it arrives on their mobile device.

Whatever your mobility strategy, or your split between Apple and Android, phishing is the biggest mobile-borne threat to your data.

Mayhem and malware

The first link in the chain of attack

Phishing has persisted because it is cheap, effective, and versatile: It can be used at scale, in massive email or SMS campaigns, or in targeted attacks against specific individuals.

Phishing is often the first step in an attack against an organisation. Criminals use it to steal passwords they can use to access internal business systems, or to gain personal information that can later facilitate a successful spear-phishing attack.

66% of UK organisations suffered a successful phishing attack in 2020

2021 State of the Phish, ProofPoint

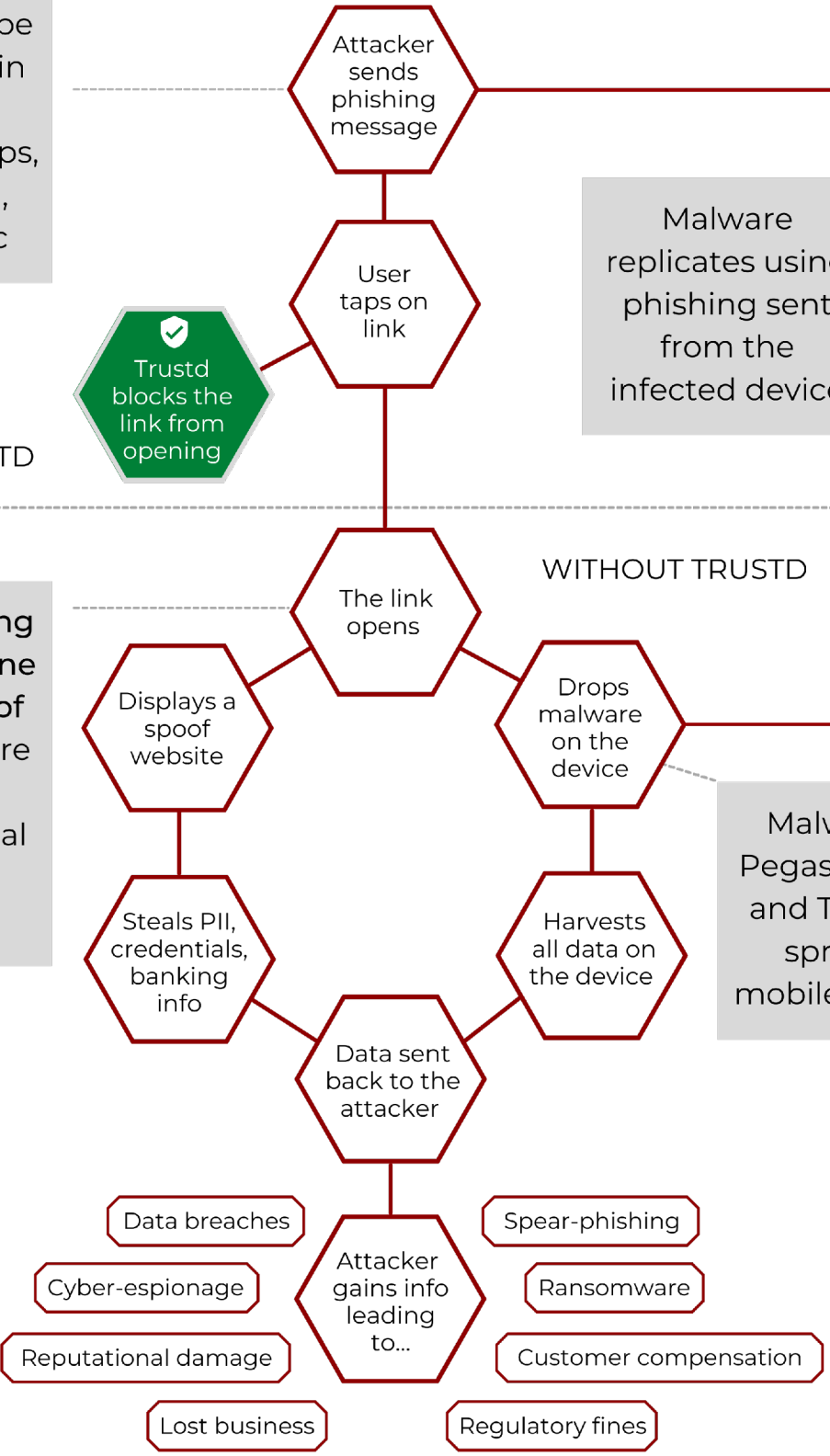
A successful phishing attack can lead to:

- **Unathorised access** to data and critical business systems,
- **Malware** such as spyware, keyloggers or banking trojans,
- **Ransomware** that encrypts files and demands payment to decrypt them,
- **Social engineering** that can result in huge financial transfers, and ultimately, to
- **data loss, fines and loss of reputation**.

The Mobile Phishing Killchain

It starts with a phish

Phishing can be sent via links in email, SMS, messaging apps, social media, websites, etc



Malware replicates using phishing sent from the infected device

Mobile phishing links lead to one of two types of threat. Both are designed to ultimately steal personal information.

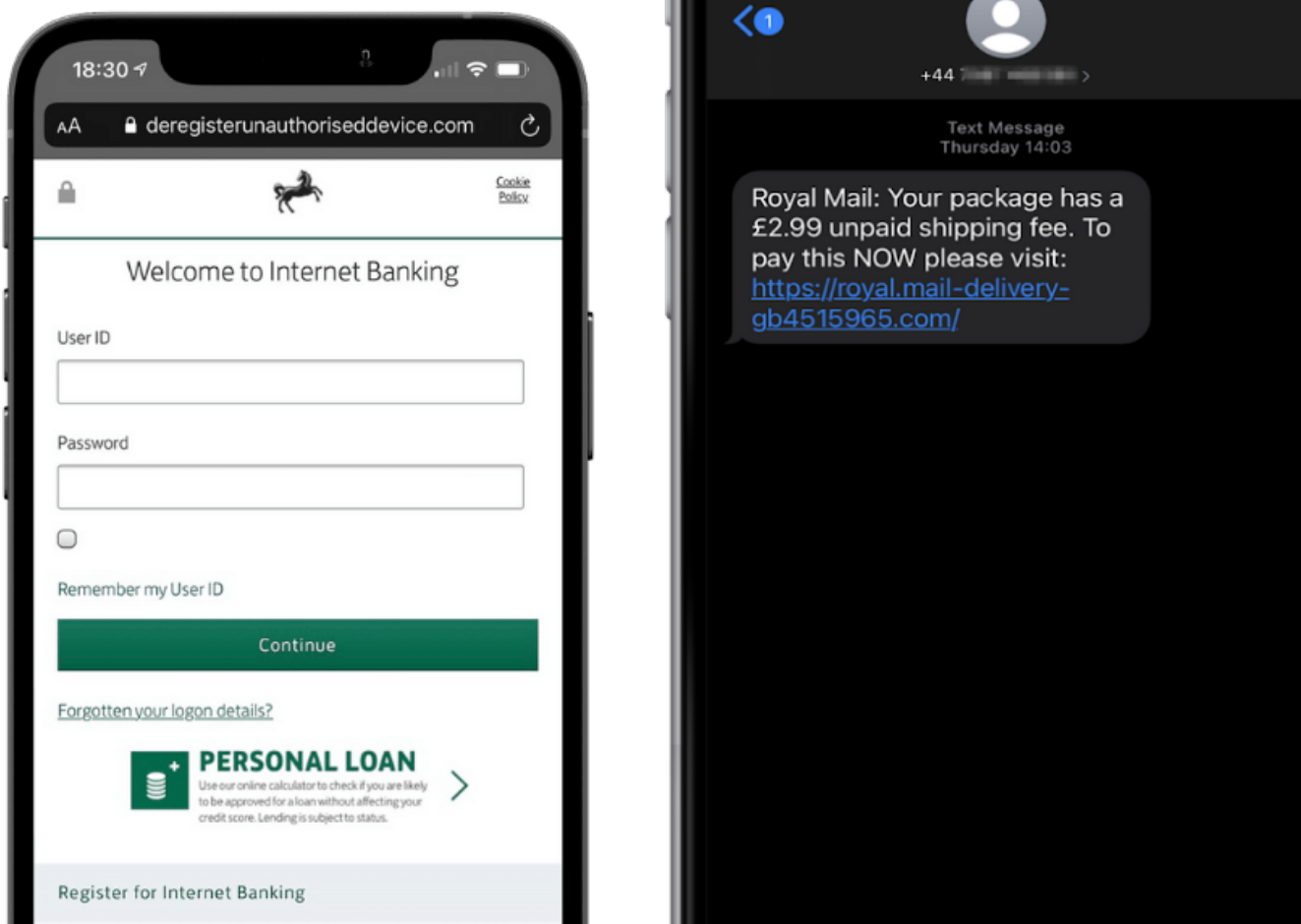
Malware like Pegasus, FluBot and TangleBot spread via mobile phishing.

If mobile phishing can lead to so many data disasters, why aren't businesses doing more to guard against it?

There are 4 myths that could account for why organisations fail to prioritise mobile phishing protection.

Fundamentally, most businesses do not have adequate protection in place, and the dangers of mobile phishing are just not very well understood - with many organisations playing catch-up when it comes to securing mobile endpoints.

Let's de-bunk some common myths around mobile phishing



Mobile Phishing Myth #1

"Our email filters will keep employees safe."

While it's true that good email filters can protect employees to some extent, especially if they use corporate email on their mobile devices, it certainly doesn't protect them from the majority of mobile phishing attacks. In fact, SMS-based phishing (smishing) has sky-rocketed.

Smishing increased by nearly 700% in the first six months of 2021 compared to the second half of 2020.

Proofpoint's reported scam data, 2021

In 2020, the **Bank of Ireland was forced to pay out €800,000** to over 300 bank customers who gave their information away in a single smishing scam.

Phishing websites or credential-stealing malware can be sent through SMS, social media, chat and messaging services, compromised apps, and even advertising networks like Google.

Mobile Phishing Myth #2

"Our MDM protects us against phishing."

MDM doesn't detect – it manages.

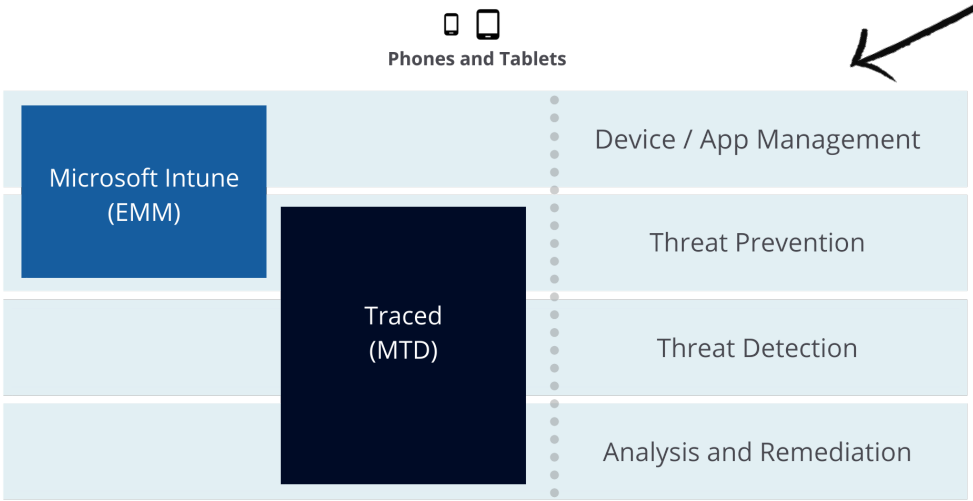
Enterprise Mobility Management or Mobile Device Management solutions are designed specifically for *managing* mobile devices.

As part of managing your organisation's devices, it can deploy policies, apps, and configuration to them.

What these solutions don't do is provide any threat detection, analysis or remediation capabilities out of the box.

So your MDM, MAM or EMM can't block phishing links or spot malware.

Here's an example of how a popular EMM, Microsoft Intune, fits in with MTD



Mobile Phishing Myth #3

"My phone's built-in security is enough to protect me."

Mobile phishing is an OS-agnostic problem.

In fact, more phishing attacks take place on iOS than on Android devices.

Because phishing links can come via many different methods - text message, email, WhatsApp messages, social posts, apps... there is very little your phone's security settings can do to protect you from attack. Phishing links look just like any other link on the face of it, and the web page they open can be innocuous enough.

63% of phishing attacks take place on iOS devices, not Android.

Mobile Phishing Report, Wandera, 2018

You give your personal information away on that web page and that data is sent to an attacker - and there are no consistent clues that tell your phone, "*this is a phishing link.*"

Mobile Phishing Myth #4

"Mobile phishing isn't a business issue, it's a personal one."

Cybercriminals use phishing to steal credentials, drop malware and gain unauthorised access.

Whether those phishing attacks are sent via mobile-only methods (such as SMS or WhatsApp), or by traditionally desktop-focused methods (like email or social media) they have the same outcome.

Even organisations who have splashed out on corporate phones for employee use aren't immune.

The fact is that we are all vulnerable to falling for a phish and it puts both our personal and business data at risk.

Malware that spreads via SMS has the potential to send thousands of text messages per day from infected devices and racking up eye-watering bills.

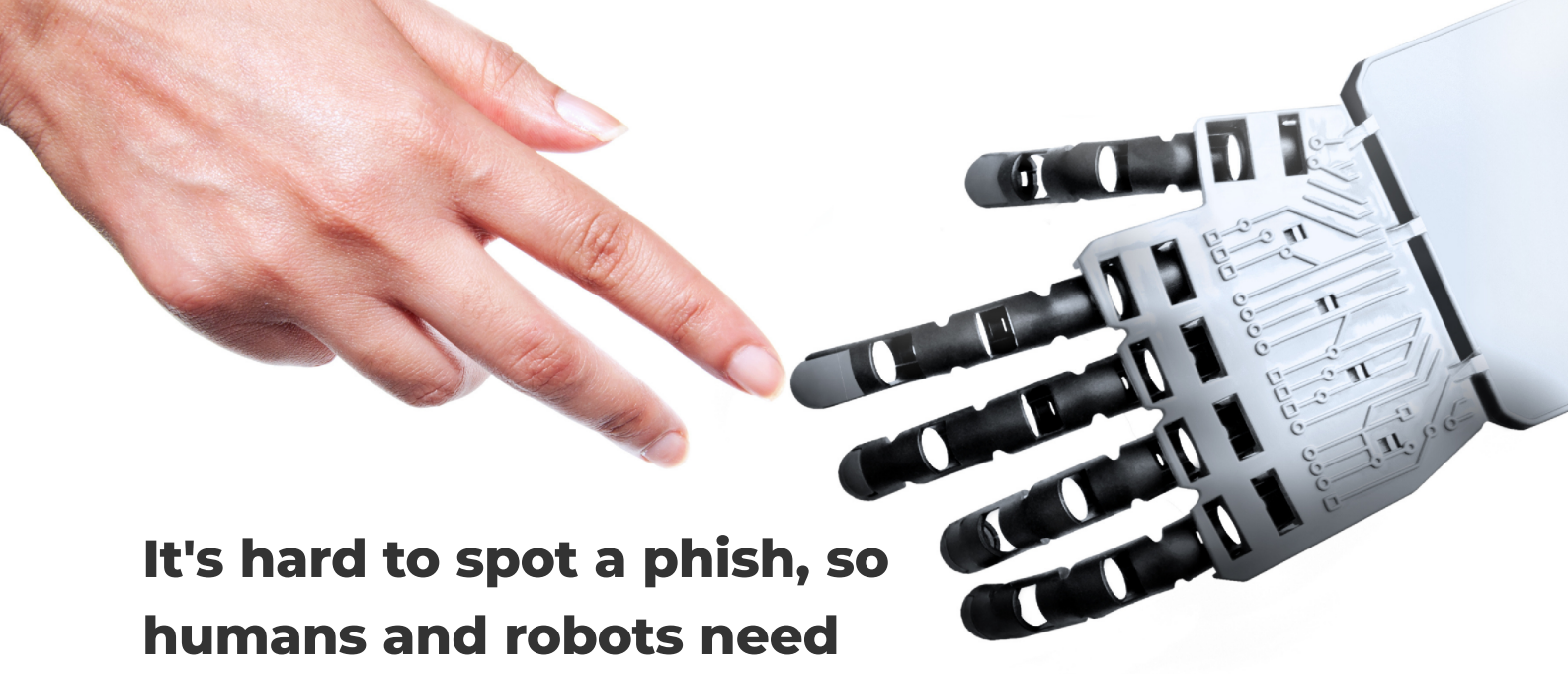
Attackers could land themselves a set of bank credentials for a company account, or login details for business platforms like Office 365 or Google Workspace.

This could also be used for Whaling within an organisation through BEC or WhatsApp by masquerading as the CEO.

Banking Trojans like Trickbot, Eventbot and Anubis are spread via mobile phishing and could be used drop ransomware on the network.

Trickbot, as an example, gathers users' mobile numbers to contact and dupe them into installing a malware Android app that steals their 2FA tokens.

So even if you've set up 2FA on business systems, your employees' phones can pass codes over to an attacker.



It's hard to spot a phish, so humans and robots need to work together

When phishing happens on a mobile phone, it can be a lot harder to spot. Although humans are cleverly wired to detect that "fishy" smell (pun intended)...

> ***Is that person being too pushy?***
> ***Was I expecting that message?***
> ***Would that company really ask me for that sort of personal information?***

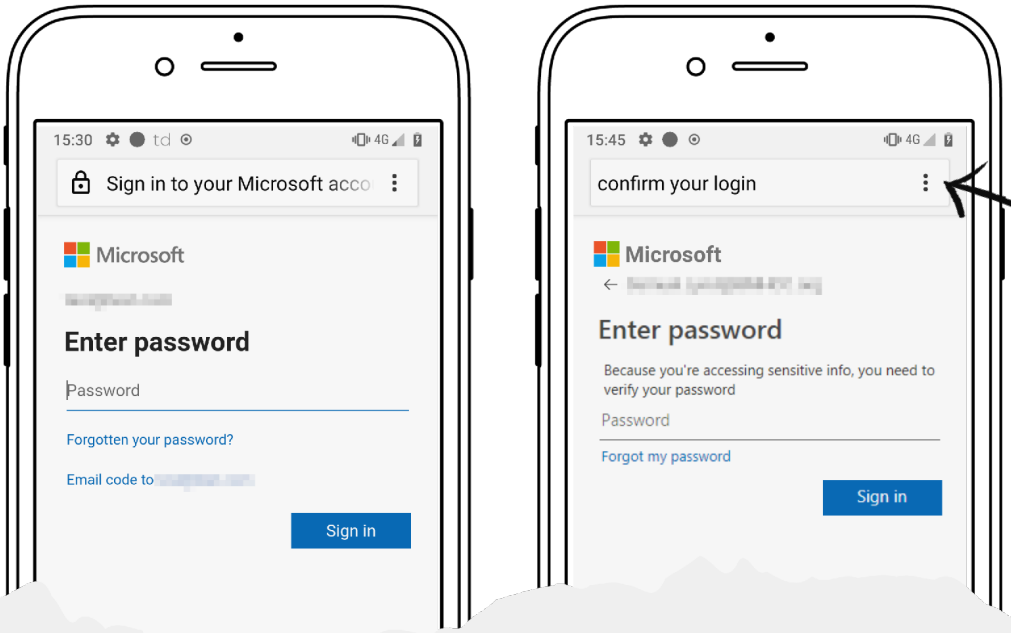
It gives us an edge over technology, it's actually really hard to spot a phish on a mobile phone. ***Why?***

- It catches you off-guard when you're distracted.
- It arrives on tiny screens.
- It targets devices that aren't protected by your company network.

Coaching staff on how to spot suspect emails is very useful when applied to desktops. Unfortunately, the same strategies don't apply to mobiles so it's important to update your phishing training to encompass mobile phishing.

6.95 million new phishing and scam pages were created in 2020.

The State of Phishing and Online Fraud 2021, Bolster



Note the browser bar. The phish (on the right) obscures the URL with a message, similar to the one the real Microsoft page has.

Phishers are increasingly using techniques which are better suited for targeting mobile users, as mobile users have fewer tools at their disposal to identify phishing links and are more likely to click on them.

"Microsoft" accounted for 29% of all phishing attacks globally in Q3/21

Brand Phishing Report Q3/21, Check Point

Combining user education with an on-device, AI-powered phishing detection engine like Traced's is crucial. The threat engine spots the repeating characteristics of a phish, blocking malicious content before it opens on the device, even if the user clicks the phishing link. This advanced anti-phishing technology means that even never-seen-before phishing links can be identified, instead of relying solely on out-dated lists of known phishing URLs.

The future of phishing

Attackers will chase the large payouts they can score from ransomware, using the intelligence they gather from mass phishing campaigns.

We expect to see an increase in targetted phishing as criminals attempt to evade phishing detection models and chase the large payouts from ransomware, rather than lots of small financial wins from mass email phishing.

Along these lines, mobile phishing in all its forms will become a greater concern for businesses, as attackers exploit the various ways that make phishing harder to spot on mobile devices. As business data is increasingly stored and accessed from mobile devices, it makes employees a more desirable target for phishers, and attacks will evolve to be more sophisticated, more prolific and more effective.

AI-driven anti-phishing on mobile devices learns to spot new phishing links to keep up with evolving attacks, but user education needs to go hand-in-glove with on-device protection.

About Traced

Traced's groundbreaking Mobile Threat Defence solution, Trustd, puts employee privacy first, while protecting businesses against mobile-borne threats such as phishing, compromised WiFi and malware.

Find out more at https://traced.app