

# Combating Email Fraud

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LEADING THE  
WAY INTO  
TOMORROW



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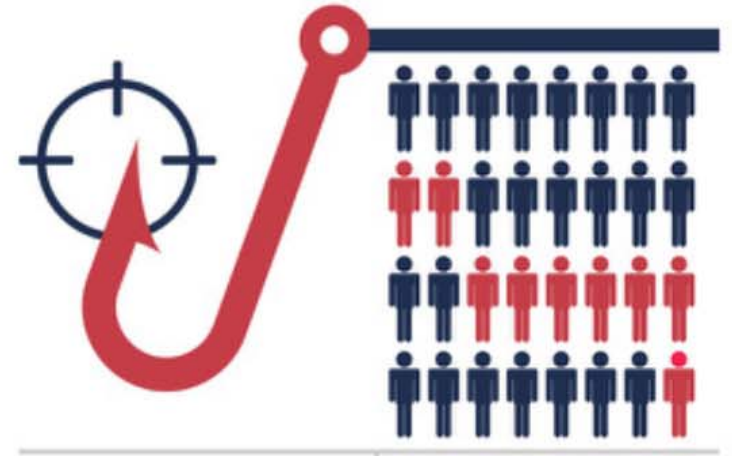
**TÜVRheinland®**  
Precisely Right.  
**ISO27001:2013**



OMAN  
**DATAPARK**  
MANAGED SECURITY SERVICES

u2

**DID YOU KNOW...**  
**JUST ONE CLICK**  
CAN COMPROMISE YOUR BRAND,  
PUT YOUR CUSTOMERS' DATA AT RISK,  
**AND DESTROY CONSUMER TRUST?**



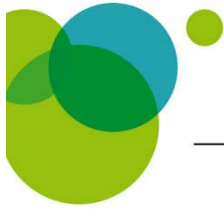
**Do you know that the bad guys can send spoofed emails on behalf your domain name and they can be reached to your partners, customers and maybe even to your own staff?**

## Slide 2

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**u2**

user, 11/4/2017



# Organizations Problems with Email

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1

Fraud email is sent to customers & business partners

- 100 billion spam messages globally per day
- 2.1 million phishing messages per day
- 73% of data breaches begin with a fraudulent email

2

It is difficult to identify fraudulent email

- Phishing emails have a 70% open rate
- 50% of users to open phishing email will open the URL or attachment



# 91% of cyber attacks start with phishing<sup>1</sup>



274% increase in phishing<sup>2</sup>

\$2.3bn cost of CEO to CFO fraud<sup>3</sup>

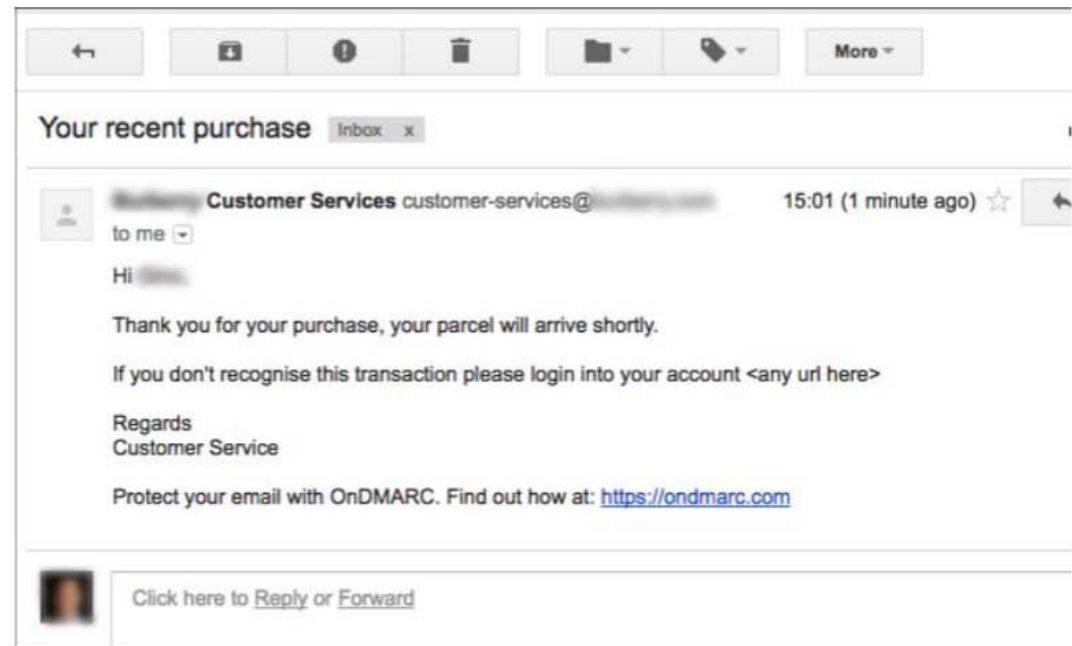
97% cannot correctly identify a phishing email<sup>4</sup>

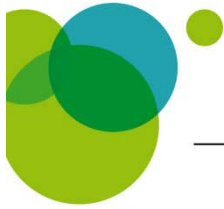
# Impersonation is easy

A gap in the email protocol allows anyone to easily send emails using your domain.

Easily done with everyday tools like telnet.

"CEO to CFO scams accounted for \$2.3 billion in losses in the past 3 years" - FBI 2016





# Fraud Email is the Start of a Data Breach

- 73% of data breaches begin with fraudulent email. The below scenarios are common methods to breach consumers devices or employee's "bring your own devices".

## User Credential Compromise

To: John Dorman  
From: ABC Bank <info@abcbank.com>  
Subject: ABC Bank Security Breach - Immediate action required

Dear Client,

Due to a recent security breach in the ABC Bank computer systems, we are asking all customers to immediately update their client profile using the link below and immediately report any unnoticed information changes, unexplained funds depletion or the likewise. Rest assured that we have the safety and privacy of our customers as our top priority but please help us by following the instructions below:

Update and verify your information by clicking the link below:  
<https://update.abcbank.com>

- URL to website to capture login credentials
- Compromised username & password often reused across websites

## Malware Installation

To: Bonus Structure  
From: Xerox Printer <printer@xerox.com>

Please download the document. It was scanned and sent to you using a Xerox multifunction device.

File Type: pdf  
Download: Scanned from a Xerox multi-9.pdf

multifunction device Location: machine location not set  
Device Name: Xerox2343

- Email often spoofs YourCompany.com, YourCompany.com, or other trusted domain

Fraud Expenses

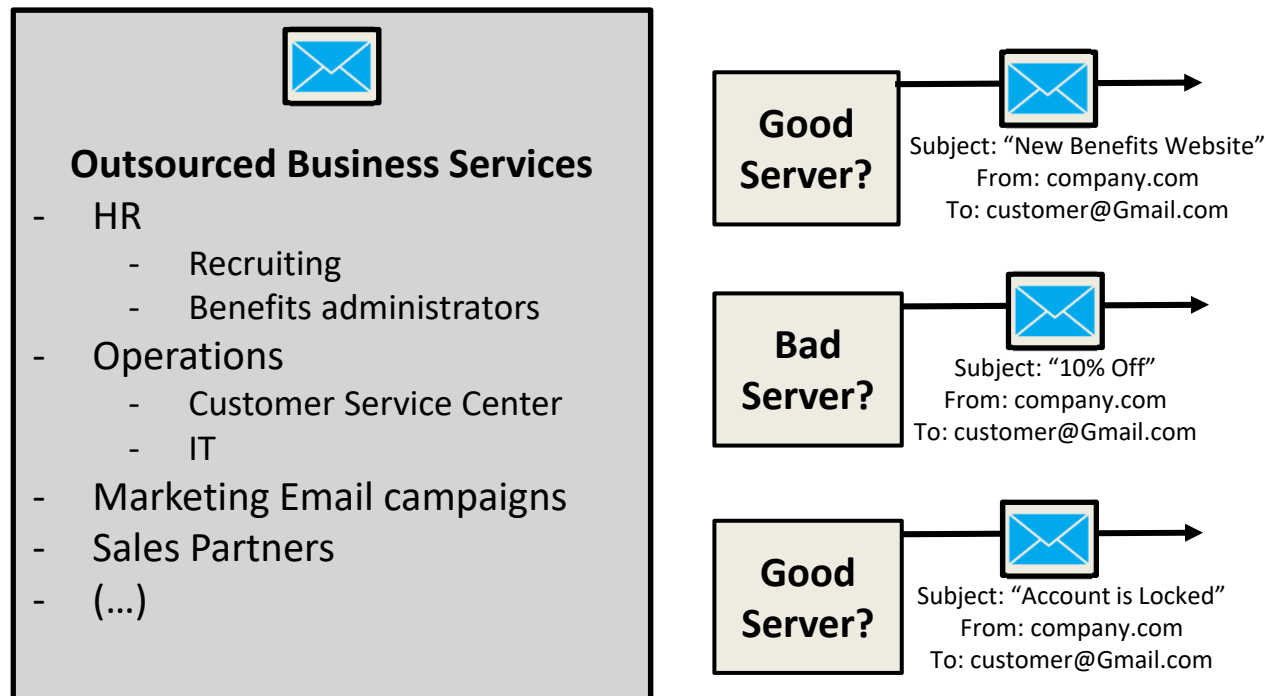
Brand Erosion

Untrusted Emails



# Difficult for Companies to Identify Emailers

- Outsourcing companies send email spoofing FROM:@company.com from their own IP addresses.



*The IT needs to distinguish  
fraud emails senders vs. outsourced senders.*



# DMARC



## A PROVEN WAY TO MITIGATE RISK

Domain-based Message Authentication, Reporting and Conformance (DMARC)  
It's like an identity check for your organization's domain name.

**DMARC prevents spammers or phishers** from using valid organization names for email fraud



**DMARC** increases customer **confidence and trust**

**It protects** the integrity of **your brand**



# DMARC Benefits for Financial Services



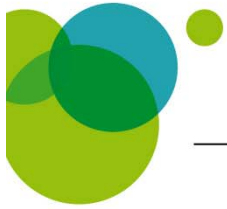
Gain 24/7/365 Email Spoofing Visibility

Leverage DMARC Authentication to Strengthen Email Security & Brand Protection

Decrease Fraudulent Email Delivery to by Over 99%

Restore Trust with Consumers via email communication





# How well does it work?

“Implementing DMARC stopped nearly 25 million attempted attacks on our customers during the 2013 holiday buying season alone”

Michael Adkins, Facebook

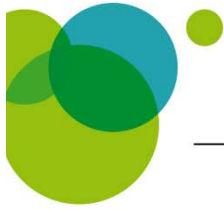


“DMARC protects more than 85% of the people who receive email from Facebook”

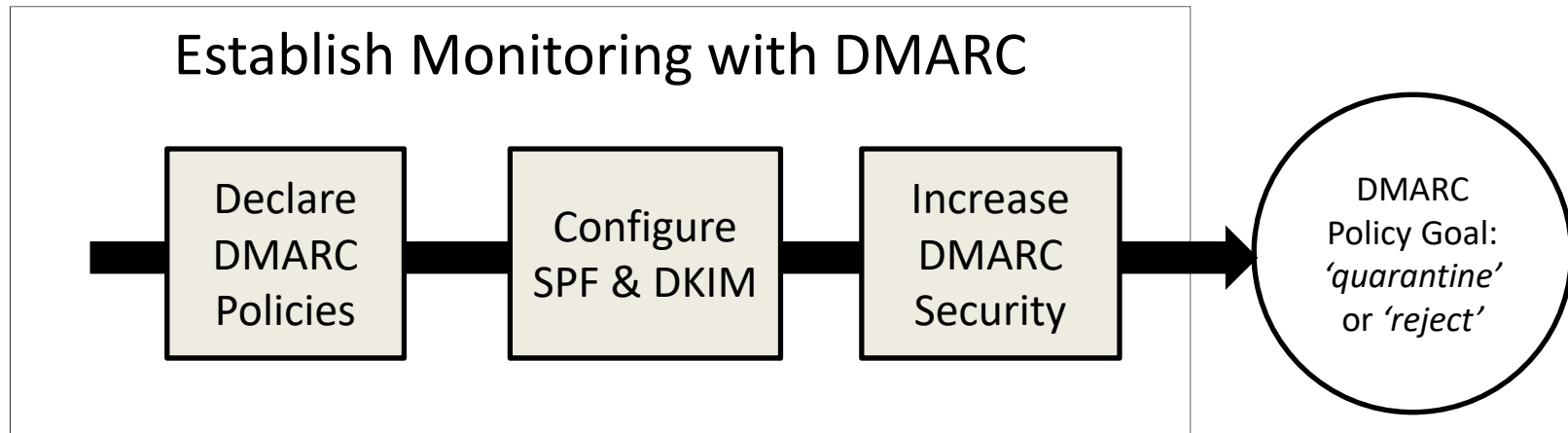
Trent Adams, PayPal/Ebay, Chair of DMARC.org

Twitter saw 110 million spoofed emails per day. Once Twitter moved to a DMARC "reject" policy, the number dropped to few thousand within days.

\* DMARC.org, [http://www.dmarc.org/news/press\\_release\\_20140218.html](http://www.dmarc.org/news/press_release_20140218.html)



# Summary of DMARC Recommendations



## Recommendations

- 1) Have a DMARC policy goal for each domain and sub-domain
- 2) Create a DMARC policy on each sub-domain to detour spoofing
- 3) Predefine the advancement criteria from p=none to p=quarantine to p=reject
- 4) Ensure DMARC pass rate of 98% - 100% before advancing the DMARC policy
- 5) Advance all parked domains to p=reject as a final state