

proofpoint.

Stop Email Misdelivery and Prevent Data Loss with AI

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Misdirected communication in every day life



Australia's opposition leader, Peter Dutton. In 2016, when he was immigration minister.

Misdirected Email in Every Industry

Email Misdelivery



Diplomats are supposed to be subtle and clever. Australia's just leaked 1,000 citizens' email addresses

Department of Finance accidentally leaks sensitive and personal information from hundreds of providers in bungled email announcement

Sensitive contract information and personal details from hundreds of Australian service providers have accidentally been leaked by the Department of Finance following a bungled email announcement.

HEALTH

Sensitive personal data of hundreds of visa applicants accidentally leaked in email mishap

Sydney high school accidentally emails out students' confidential health and welfare information

Incorrect Recipient
(Mistaken Inclusion)

Incorrect Recipient
(Typo)

Misattached File
(Individual Recipient)

Misattached File
(Many Recipients)

Incorrect Recipient (Mistaken Inclusion)

Who: US Based Health Insurance Provider

What Happened:

- Daily emails with PHI sent to incorrect recipient
- PHI of 8k+ members exposed over 17 months

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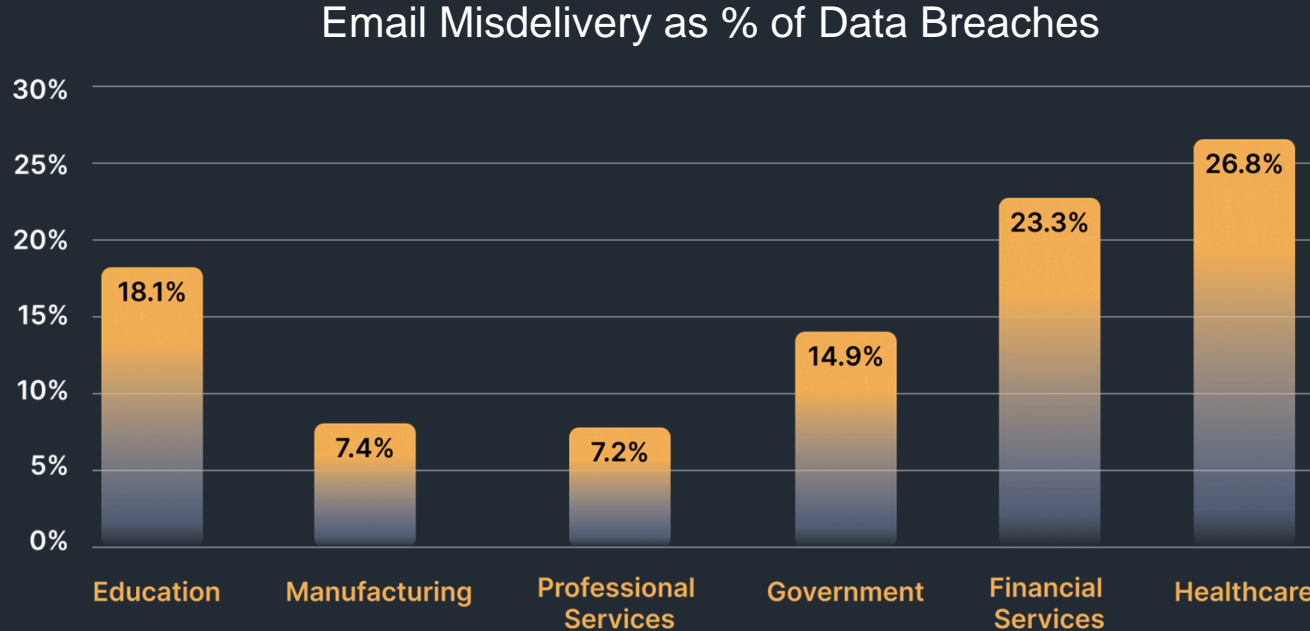
Misattached File (Many Recipients)

Who: Australian Government Department

What Happened:

- Attached a spreadsheet containing tender bidding prices and PII to 236 suppliers
- Leaked 400 service providers confidential information

How big is the risk across industries?



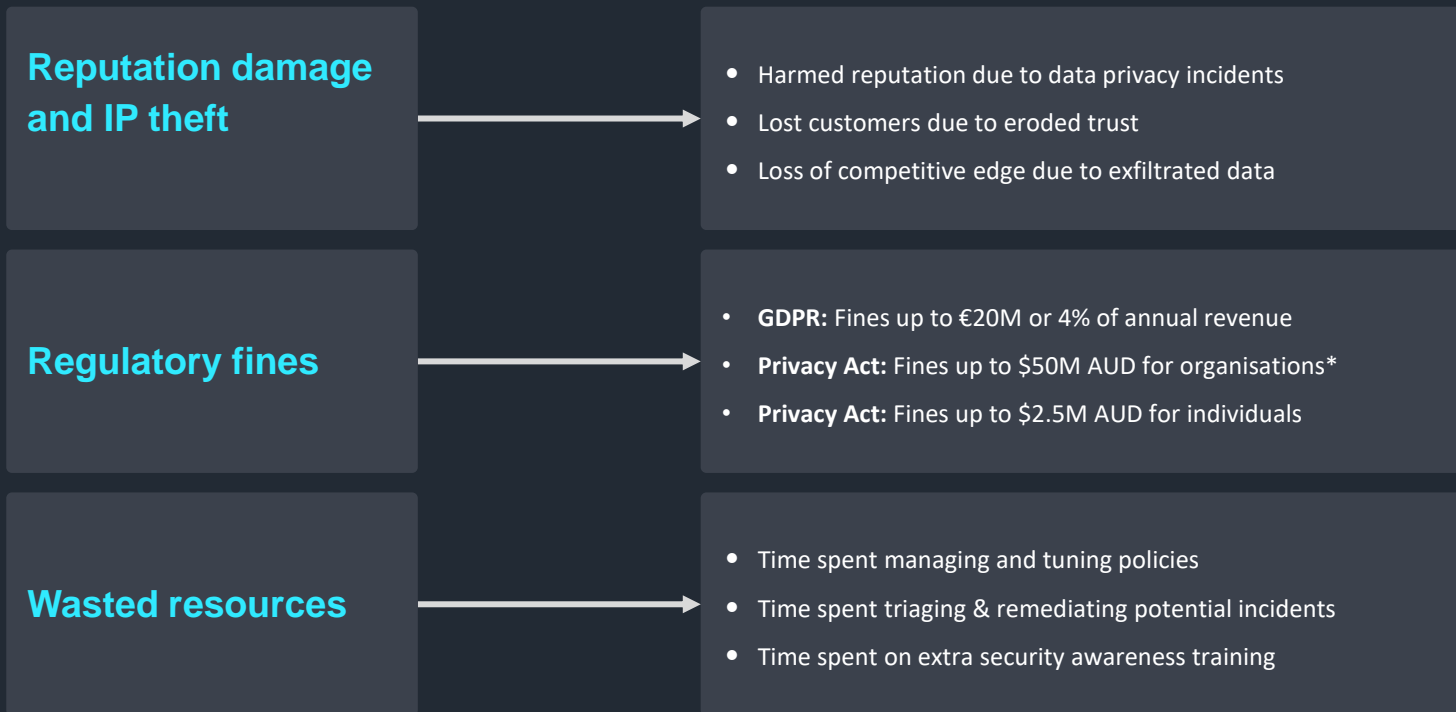
Source: 2022 Verizon DBIR

How big is the risk at your organisation?

33% of employees send at 1-2 misdirected email a year

Users	Misdirected Emails	Misattached Files	Email Exfiltration Preventions
5,000	3,408	178	751
10,000	6,816	356	1,502
20,000	13,632	712	3,004
50,000	34,080	1,780	7,510

Misdirected Emails Cause Material Business Impact



Rule-Based Email DLP Plays an Important Role



Rule-Based DLP Only Catches Pre-defined Risks



Rule-Based DLP Only Catches Pre-defined Risks

Infinite variations of
recipient concurrence

IF RECIPIENT/DOMAIN = A & B, BLOCK

B & C

C & D

C & D & E

C & D OR E & F

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Infinite variations of
recipient concurrence

IF RECIPIENT/DOMAIN = A & B, BLOCK

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C & D & E

C & D OR E & F

Infinite variations of
content, attachments
and recipients

IF KEYWORDS = (1, 2, 3) AND RECIPIENT/DOMAIN \neq A, BLOCK

(4, 5, 6)

\neq B, BLOCK

(7, 8, 9)

\neq C, BLOCK

(10, 11, 12)

\neq D, BLOCK

The background of the image shows a crowd of people from a low angle, their arms raised holding various protest weapons. These include a large pitchfork, a machete, a hammer, a pickaxe, a crowbar, and a megaphone. The scene is set against a dramatic, cloudy sky with a bright light source, possibly the sun, breaking through the clouds on the right side. A semi-transparent dark grey horizontal band runs across the middle of the image, serving as a backdrop for the title text.

Exceptions

Rule-based Email DLP Systems Are Blind to Many Data Loss Incidents

Project Idaho - Financials



Sandra Kim

Jan 14, 2023 06:23PM (UTC)

To: Julia Smith, Margaret McCullum, John Alvarez

Hi Julia,

Thanks for the update yesterday. I have now run the numbers by my team to confirm we are ready to proceed with Idaho in Q3. Please find attached the latest financials.

Best regards,

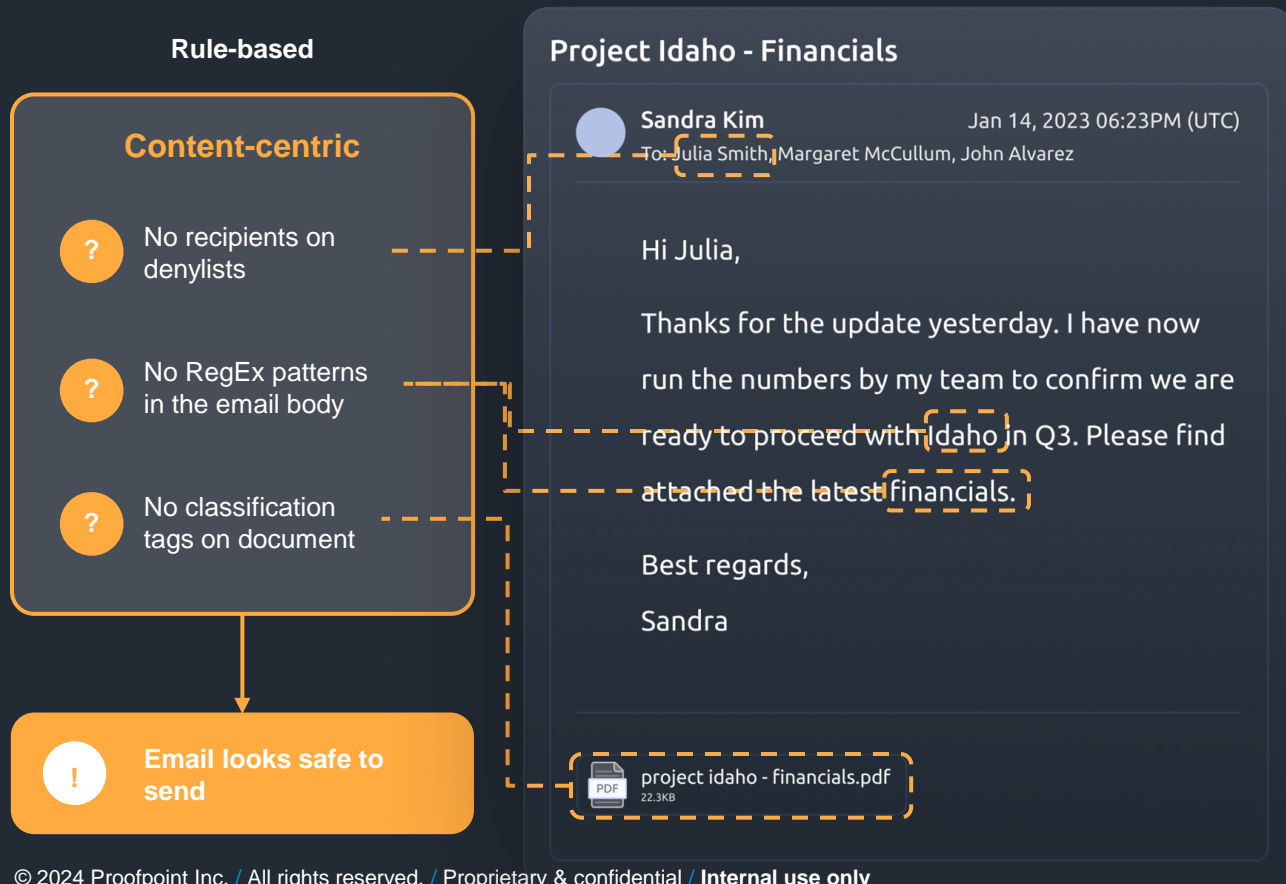
Sandra



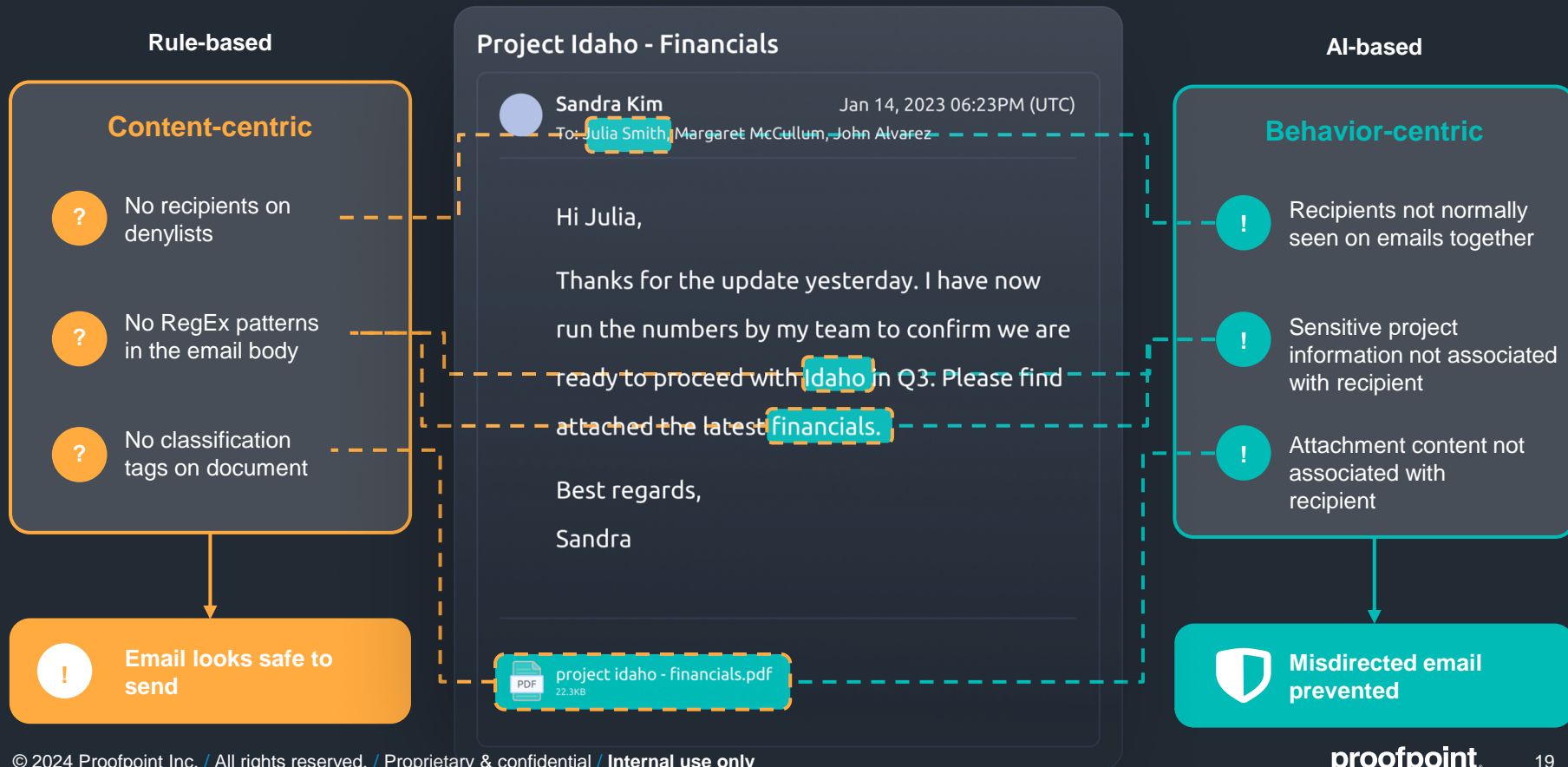
project idaho - financials.pdf

22.3KB

Rule-based Email DLP Systems Are Blind to Many Data Loss Incidents



Adaptive Email DLP Automatically Detects What Rule-based DLP Misses



Adaptive Email DLP Automatically Detects What Rule-based DLP Misses

Rule-based

Content-centric

- ? No recipients on denylists
- ? No RegEx patterns in the email body
- ? No classification tags on document

! Email looks safe to send

Project Idaho - Financials



Sandra Kim

Jan 14, 2023 06:23PM (UTC)

To: Julia Smith, Margaret McCullum, John Alvarez

TESSIAN

Is this the correct recipient?

julia.smith@onebank.com (Julia Smith)

There is similarly names contact in your network [julia.smith@twofin.com](#) (Julia Smith), who has a stronger correlation to the keywords contained in the subject.

Would you still like to send this email?

Send email

Don't Send email

Sandra



project idaho - financials.pdf
22.3KB

AI-based

Behavior-centric

- ! Recipients not normally seen on emails together recipients on denylists
- ! Sensitive project information not associated with recipient
- ! Attachment content not associated with recipient



Misdirected email prevented

Summary

- Email is one of the riskiest channels for data loss in your organisation
- Double check the email addresses of recipients and verify attachments before sending
- Use the delay sending feature in your email client
- Educate employees
- Utilise the message recall function
- Use adaptive AI driven email data loss prevention tools

Is Misdirected Email a Concern for you?

Come and talk to us at the Proofpoint stand...we have a number of goodies on offer!!

1. AI-generated Superhero Portraits



2. Newly released reports



3. Proofpoint Merchandise

