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**95% of cyber incidents are caused
by human error.**

Source: <https://www.weforum.org/reports/global-risks-report-2022>

Reducing the Human Error Rate

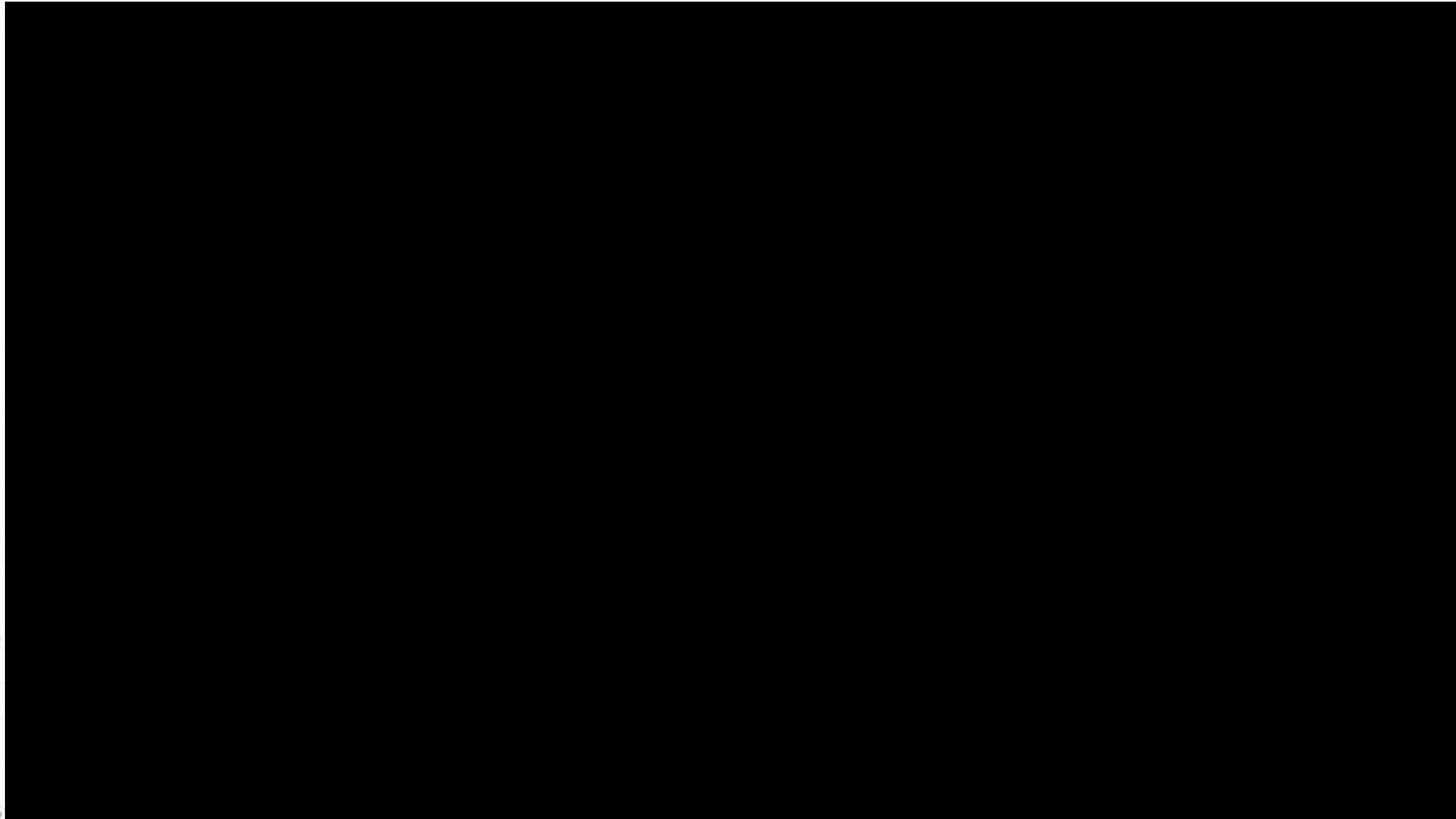
Jim Seaman, Director
IS Centurion Consulting Ltd



Agenda

- **Leading An Effective PCI DSS Program**
- **Setting The Scene**
- **Understanding Human Failure**
- **Focus On The Human Factor**
- **Less Is More...**
- **A Time For Change**
- **Engage & Explain**
- **Turn Information Into Actionable Intelligence**
- **Think Beyond Compliance**
- **Cyber Security Statistics & Facts**

Leading An Effective PCI DSS Program



Source: <https://www.mindtools.com/pages/videos/leaderskillsquiz-transcript.htm>

10 Common Leadership and Management Mistakes: Avoiding Universal Pitfalls

1. Not Providing Feedback.
2. Not Making Time for Your Team.
3. Being Too "Hands-Off".
4. Being Too Friendly.
5. Failing to Define Goals
6. Misunderstanding Motivation.
7. Hurrying Recruitment.
8. Not "Walking the Walk".
9. Not Delegating.
10. Misunderstanding Your Role.

Setting the Scene

1 in 5 companies lost customers following a misdirected email.



58% of employees have sent an email to the wrong person at work.



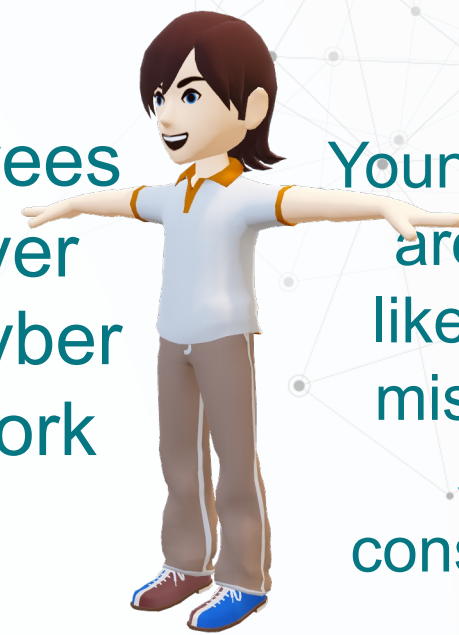
1 in 4 employees have clicked on a phishing email at work.



1/3 of employees rarely or never think about cyber security at work



57% of employees are more distracted when working from home



Younger workers are **5x** more likely to make mistakes with security consequences.

93% of staff are tired and stressed at work.



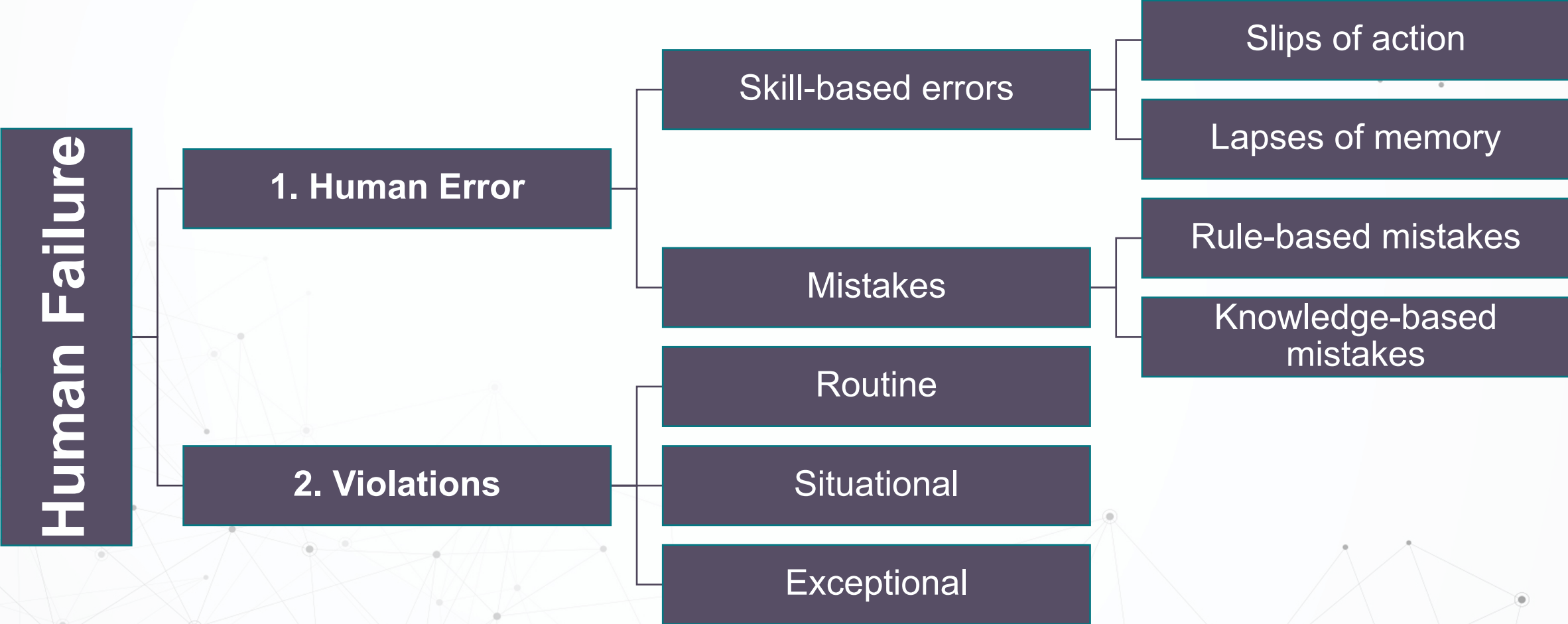
> 50% employees make more mistakes when they're stressed, while **43%** are more error-prone when tired.

1 in 10 feel tired every day of the week.

Source: **The Psychology of Human Error**

Understand the mistakes that compromise your Company's cybersecurity

Understanding Human Failure



Focus on the Human Factor

- **Policy**

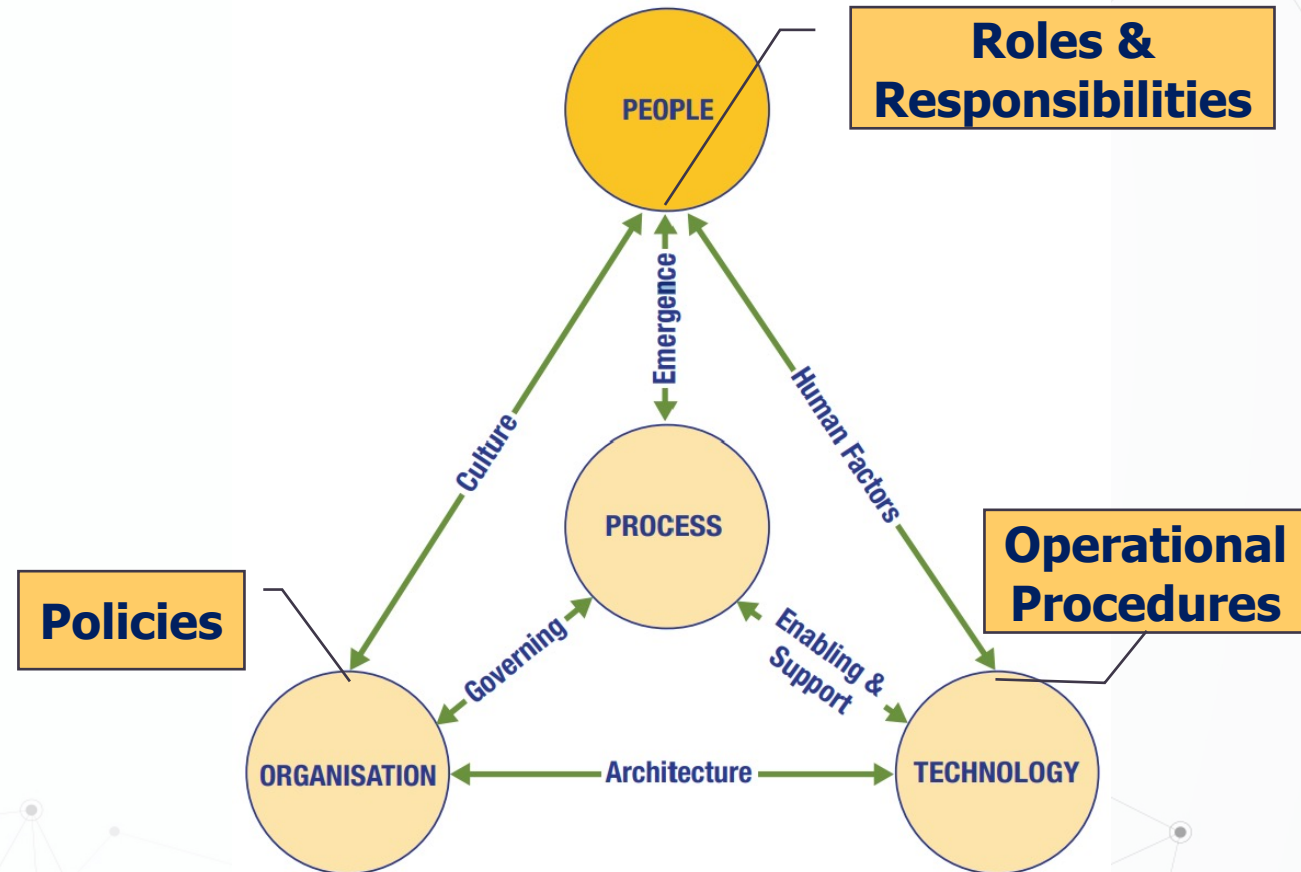
- Communicate an organization's values, philosophy, and culture.

- **Process**

- A series of related tasks or methods that together turn inputs into outputs.

- **Operational Procedure**

- Step-by-step instructions for specific routine tasks.



Less Is More

...

The average attention span = **8.25 seconds**

An office worker will check their email inbox, on average, **11 times an hour.**

The average person picks up their phone more than **1,500 times every week.**

Users will read **28%** of the words during an average visit of a web page

The average amount of time someone watches an internet video is **2.7 minutes.**

A 20-page policy will take on average **40 mins** for the employee to read.
They will switch off after 4 lines of text

59% of senior executives prefer to watch a video than read text if they had the choice.

A Time For Change?

- **Leadership.**
 - Setting the right example.
 - Supporting the initiative.
- **Followership.**
- **Embrace the Hierarchy of needs.**
 - Let them feel part of the process.
 - Welcome their contribution/support.
- **Teamwork.**
 - Know your team strengths & weaknesses
- **Work Smarter, Not Harder.**
 - Consider automation.



Plant

Tends to be highly creative and good at solving problems in unconventional ways.

Strengths: Creative, imaginative, free-thinking, generates ideas and solves difficult problems.

Allowable weaknesses: Might ignore incidentals, and may be too preoccupied to communicate effectively.

Don't be surprised to find that: They could be absent-minded or forgetful.



Engage & Explain

Think Beyond Compliance

- Could you reduce the effort needed to retain secure operations?
- Do you have any single points of failure?
- Do you employ a team approach?
 - *Leadership?*
 - *Management?*
 - *Followership?*
- Do you use a variety of different ways to communicate?
- Do you use the Keep It Simple Solution (KISS)?
- Are your policies, processes & operational procedures effective?
 - *Overly wordy?*

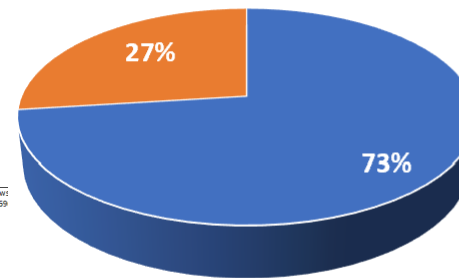
Turning Information Into Actionable Intelligence

Vulnerability Management

Vulnerability CVSSv3 Score	Vulnerability Title	Vulnerability Description
9.8	Adobe Acrobat: AFSB16-33 (CVE-2016-1089): Security Updates Available for Adobe Acrobat and Reader	Use-after-free vulnerability in Adobe Reader and Acrobat before 11.0.18, Acrobat and Acrobat Reader DC Classic before 15.006.30243, and Acrobat and Acrobat Reader DC Continuous before 15.020.20039 on Windows and OS X allows attackers to execute arbitrary vectors, a different vulnerability than CVE-2016-1091, CVE-2016-6944, CVE-2016-6945, CVE-2016-6946, CVE-2016-6949, CVE-2016-6952, CVE-2016-6953, CVE-2016-6961, CVE-2016-6962, CVE-2016-6963, CVE-2016-6964, CVE-2016-6965, CVE-2016-6967, CVE-2016-6968, CVE-2016-6979, CVE-2016-6988, and CVE-2016-6993.
9.8	Adobe Acrobat: AFSB16-33 (CVE-2016-1091): Security Updates Available for Adobe Acrobat and Reader	Use-after-free vulnerability in Adobe Reader and Acrobat before 11.0.18, Acrobat and Acrobat Reader DC Classic before 15.006.30243, and Acrobat and Acrobat Reader DC Continuous before 15.020.20039 on Windows and OS X allows attackers to execute arbitrary vectors, a different vulnerability than CVE-2016-1089, CVE-2016-6944, CVE-2016-6945, CVE-2016-6946, CVE-2016-6949, CVE-2016-6952, CVE-2016-6953, CVE-2016-6961, CVE-2016-6962, CVE-2016-6963, CVE-2016-6964, CVE-2016-6965, CVE-2016-6967, CVE-2016-6968, and CVE-2016-6993.
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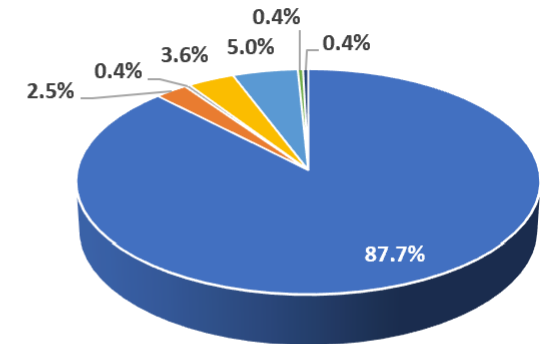
Assets		Vulnerability Category	Count
Total Scope	55	Adobe	212
Affected assets	40	Apache	6
		MS CVE-2018	1
		MS CVE-2021	9
		MS CVE-2022	12
		Obsolete MS Silverlight	1
		McAfee Agent	1
		Totals	242

Critical Vulnerabilities %



- Assets with critical vulnerabilities
- Assets without critical vulnerabilities

Vulnerability Categories



- Adobe
- Apache
- MS CVE-2018
- MS CVE-2021
- MS CVE-2022
- Obsolete MS Silverlight

* Adobe Acrobat DC >= 15.0.20000 and < 15.020.20039 on Microsoft Windows

Cybersecurity Stats & Facts

1. The worldwide information security market is forecast to reach **\$366.1 billion** in 2028. (Fortune Business Insights).
2. **68%** of business leaders feel their cybersecurity risks are increasing. (Accenture).
3. On average, only **5%** of companies' folders are properly protected. (Varonis).
4. **54%** of companies say their IT departments are not sophisticated enough to handle advanced cyberattacks. (Sophos).
5. Cyber fatigue, or apathy to proactively defending against cyberattacks, affects as much as **42%** of companies. (Cisco).
6. **43%** of all breaches are insider threats, either intentional or unintentional. (Check Point).
7. Data breaches exposed **22 billion records in 2021**. (RiskBased Security).

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