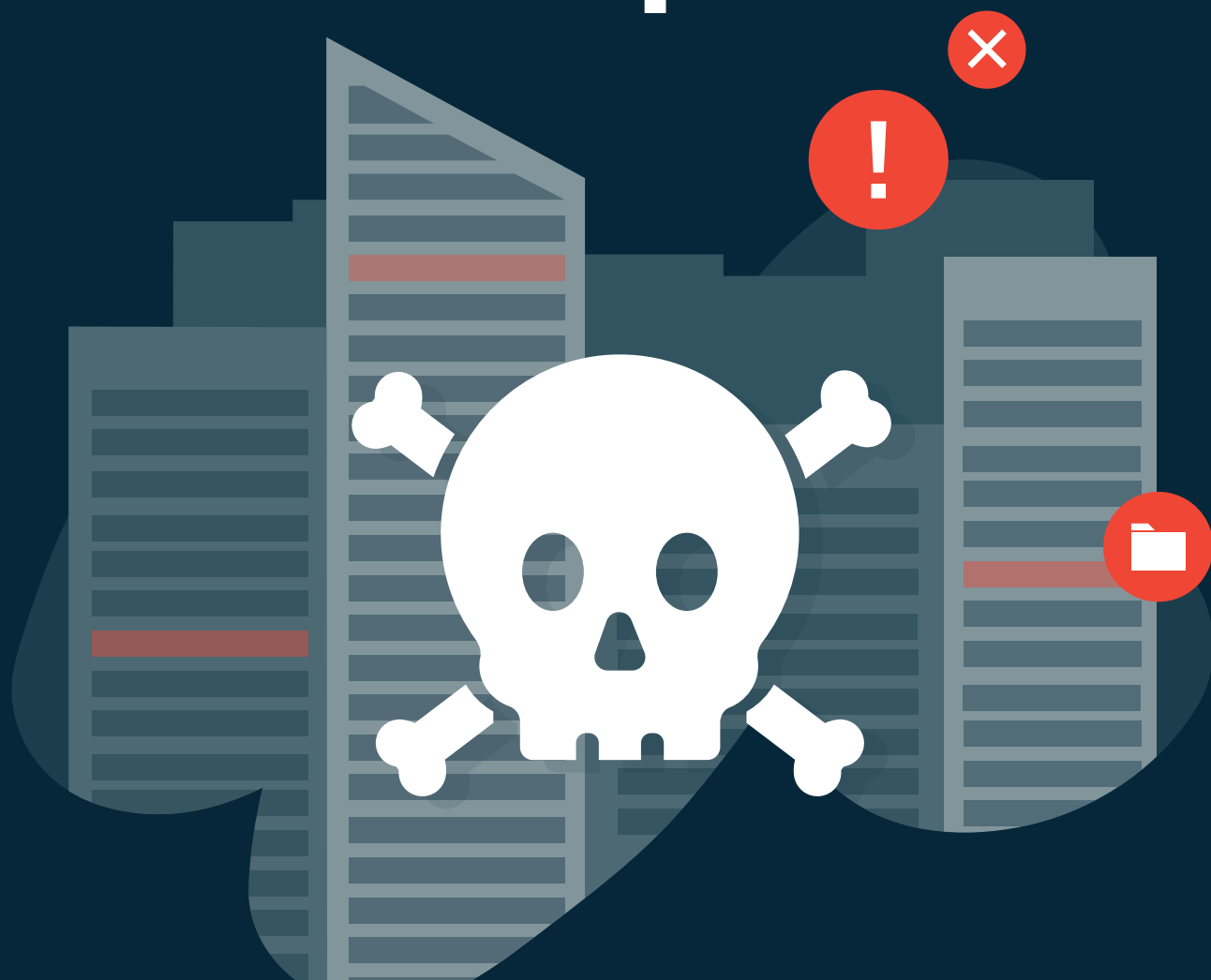


Report



# Datto's Global Ransomware Report



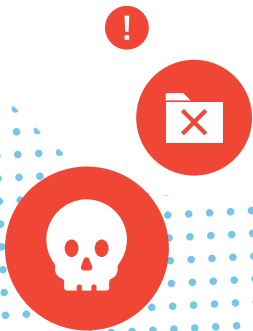
The background is a dark teal color with a repeating pattern of white and light blue icons and lines. The icons include a skull, a folder with an 'x', a cloud, a padlock, a document, and a triangle with an exclamation mark. These are connected by a network of solid and dashed lines, creating a complex, interconnected web-like structure.

## About the Report

Datto's Global State of the Channel Ransomware Report is comprised of statistics pulled from a survey of **1,400+** managed service providers (MSPs), our partners, and clients, around the world. The report provides unique visibility into the state of ransomware from the perspective of the IT Channel and their SMB clients who are dealing with these infections on a daily basis. The report provides a wealth of detail on ransomware, including year-over-year trends, frequency, targets, impact, and recommendations for ensuring recovery and continuity in the face of the growing threat.

## Key Findings

- **Ransomware remains the most prominent malware threat.** In 2019, 85% of MSPs report ransomware as the most common malware threat to SMBs.
- **In the first half of 2019 alone, 56% of MSPs report attacks against clients.** 15% of MSPs report multiple ransomware attacks in a single day.
- **On average, 1 in 5 SMBs report that they've fallen victim to a ransomware attack.** SMBs who don't outsource their IT services are more at risk.\*
- **When it comes to the ransomware threat, there is a disconnect between MSPs and SMBs.** 89% of MSPs are "very concerned" about the ransomware threat and 28% report their SMB clients feel the same.
- **MSPs rank phishing emails as the leading cause of successful attacks.** Lack of cybersecurity training, weak passwords, and poor user practices are among the other top causes.
- **The aftermath of a ransomware attack can be a nightmare for any business.** Nearly half of MSPs report victimized clients experienced business-threatening downtime.
- **The average ransom requested by hackers is increasing.** MSPs report the average requested ransom for SMBs is ~\$5,900, up 37%, year-over-year.
- **Downtime costs are up by 200% year-over-year,** and the cost of downtime is 23X greater than the average ransom requested in 2019.
- **92% of MSPs report that clients with BCDR solutions in place are less likely to experience significant downtime during a ransomware attack.** 4 in 5 MSPs report that victimized clients with BCDR in place recovered from the attack in 24 hours, or less.
- **SMBs aren't the only businesses being targeted by hackers.** 4 in 5 MSPs agree that their own businesses are being increasingly targeted by ransomware attacks.



*\*Source: Strategy Analytics' proprietary research of the North American SMB market.*

## A Variety of Malware Targeting SMBs

Which of the following types of malware have affected your clients in the last 2 years?



**61%** of MSPs  
report SMBs  
struck by **viruses**



**54%** of MSPs  
report SMBs  
struck by **adware**



**46%** of MSPs  
report SMBs  
struck by **spyware**



**29%** of MSPs  
report SMBs  
struck by **cryptojacking**



**26%** of MSPs  
report SMBs  
struck by **remote access trojans**



**20%** of MSPs report SMBs struck by rootkits  
**18%** of MSPs report SMBs struck by worms  
**14%** of MSPs report SMBs struck by keyloggers  
**13%** of MSPs report SMBs struck by exploit kits

*\*Survey respondents were able to select multiple answer choices.*

Among the malware threats impacting SMBs, **ransomware** is the **biggest offender**.



**85%** of MSPs report **attacks against SMBs** in the last two years



In the first half of 2019 alone, **56%** of MSPs report **attacks against clients**



**15%** of MSPs report **multiple ransomware attacks** in a single day



### Geo Trend:

In **Australia and New Zealand**, **91%** of MSPs report **attacks against SMBs** in the last two years, the highest rate globally.

# 1 in 5 SMBs report that they've fallen victim to a ransomware attack.\*

On average, SMBs who don't outsource their IT services report facing more ransomware attacks.\*



*\*Source: Strategy Analytics' proprietary research of the North American SMB market.*

In 2019

**28%**

of MSPs report  
**SMBs are 'very concerned'** about  
ransomware

There is a  
**disconnect between  
SMBs and MSPs** on the  
significance of the  
ransomware threat.

**89%**

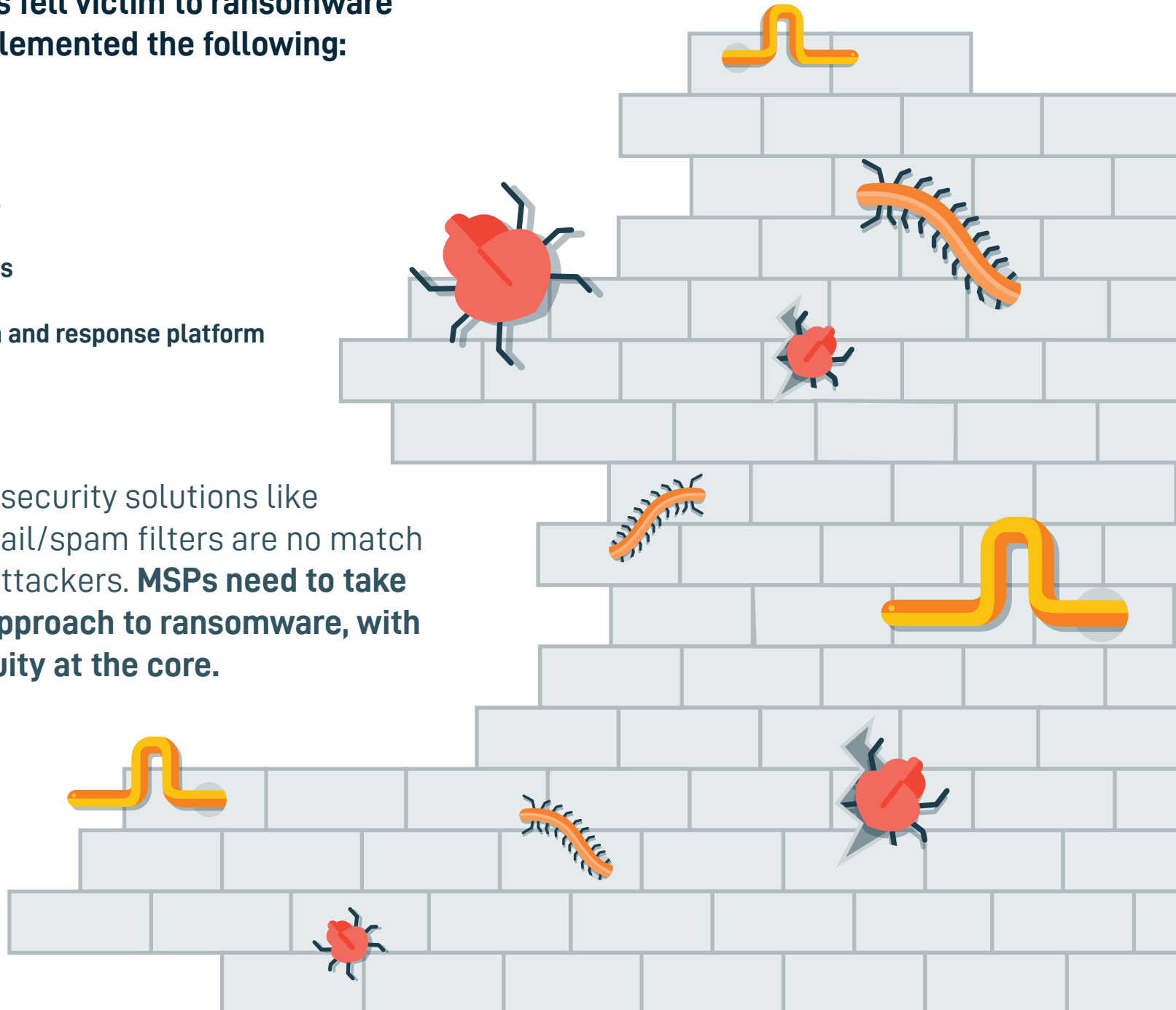
of MSPs report  
**SMBs should be 'very  
concerned'** about the threat

# Ransomware Continues to Creep Past Cybersecurity Solutions

MSPs report clients fell victim to ransomware despite having implemented the following:

- Antivirus software
- Email/spam filters
- Ad/pop-up blockers
- Endpoint detection and response platform

Traditional cybersecurity solutions like antivirus and email/spam filters are no match for many cyber attackers. **MSPs need to take a multilayered approach to ransomware, with business continuity at the core.**





## SMBs Continue to Take the Bait

Which of the following are the leading causes of ransomware?

**67%** of MSPs report  
**phishing emails**

**36%** of MSPs report  
**lack of cybersecurity training**

**30%** of MSPs report  
**weak passwords/access management**

25% of MSPs report poor user practices/gullibility  
16% of MSPs report malicious websites/web ads  
16% of MSPs report clickbait



Phishing, lack of cybersecurity training, and weak passwords are the top three **causes of successful ransomware attacks.**

*\*Survey respondents were able to select multiple answer choices.*

Which of the following consequences resulted from a ransomware attack?

**64%** of MSPs report

loss of business productivity

**33%** of MSPs report

infection spread to other devices on the network

**45%** of MSPs report

business-threatening downtime

**29%** of MSPs report

decreased client profitability

**34%** of MSPs report

lost data and/or device

**24%** of MSPs report

clients paid a ransom and recovered the data

18% of MSPs report damaged reputations

12% of MSPs report stolen data

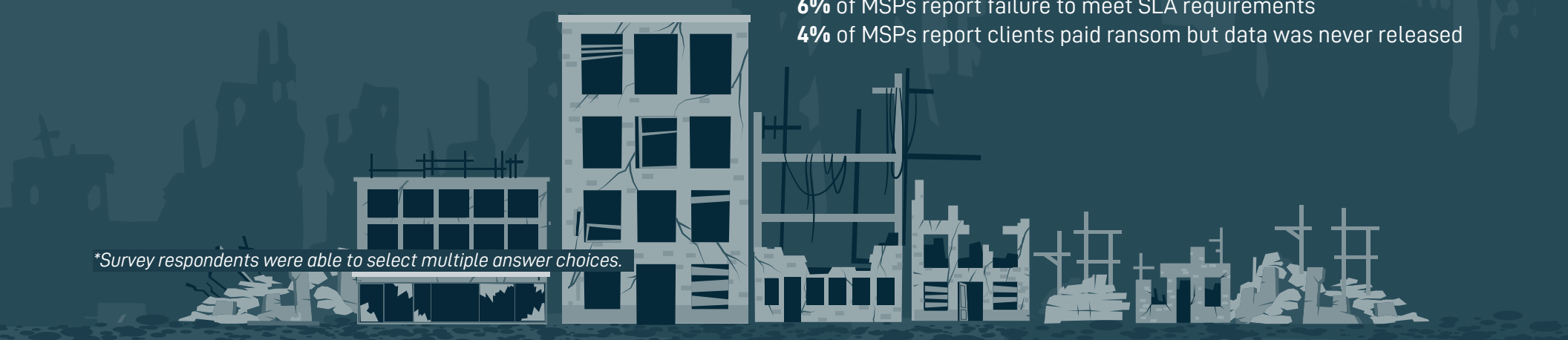
10% of MSPs report ransomware remained on system and struck again!

7% of MSPs report failure to achieve regulatory compliance

6% of MSPs report failure to meet SLA requirements

4% of MSPs report clients paid ransom but data was never released

*\*Survey respondents were able to select multiple answer choices.*





When it comes to ransomware attacks, MSPs report the **cost of downtime** is

**23X** greater than the ransom requested

### Average Ransom

2018 **\$4,300**  2019 **\$5,900**

MSPs report the average **cost of ransom increased by 37%** from previous year

### Average Cost of Downtime

2018 **\$46,800**  2019 **\$141,000**

The average **downtime cost per incident** has soared **over 200%** from previous year

### Geo Trend:

In Canada, MSPs report the highest **average cost of downtime at \$180,000.**

*\*All survey respondents answered in U.S. dollars.*

Which of the following strains of ransomware have affected your clients?

**66%** of MSPs report  
**CryptoLocker**

00:00:35

For the 4th consecutive year, **MSPs report CryptoLocker as the top ransomware variant** attacking clients.

*\*Survey respondents were able to select multiple answer choices.*



**49%** of MSPs report  
**WannaCry**



**34%** of MSPs report  
**CryptoWall**



**24%** of MSPs report  
**Locky**

17% of MSPs report Petya  
14% of MSPs report CryptXXX  
12% of MSPs report notPetya  
11% of MSPs report TeslaCrypt  
10% of MSPs report Emotet (**NEW**)  
7% of MSPs report CBT Locker  
7% of MSPs report TorrentLocker  
7% of MSPs report CrySis  
6% of MSPs report Bad Rabbit  
5% of MSPs report Wallet (**NEW**)  
4% of MSPs report CoinVault

**32%** of MSPs report

### Construction and Manufacturing most targeted by ransomware



It's not surprising that Construction and Manufacturing are top targets for ransomware. These industries are in a constant wave that flows with the ups and downs of the economy. Because of this, much of their work is project-based and recurring revenue is rare. As a result, it makes it difficult to invest in IT staffing or IT services that require monthly fees.

**Vince Tinnirello**, Managing Director, Anchor Network Solutions, Inc.

**31%** Professional Services  
**23%** Healthcare  
**20%** Finance/Insurance  
**18%** Non-Profit  
**18%** Legal  
**15%** Retail  
**12%** Real Estate  
**9%** Architecture/Design  
**9%** Government

**8%** Education  
**7%** Consumer Products  
**5%** Travel/Transportation  
**6%** Media/Entertainment  
**4%** High Technology  
**4%** Energy/Utilities  
**2%** Telecom  
**11%** Other/None



*\*Survey respondents were able to select multiple answer choices.*



**89%** of MSPs report  
**ransomware infecting  
endpoint systems**

Of the 89%...



**87%** of MSPs report  
attacks on  
**Windows PC**

**11%** of MSPs report attacks on Windows Tablet

**7%** of MSPs report attacks on MacOS X

**5%** of MSPs report attacks on Android

**3%** of MSPs report attacks on iOS



### Geo Trend:

In Europe, 10% of MSPs report ransomware infecting Android systems, **exceeding the global average of 5%.**

*\*Survey respondents were able to select multiple answer choices.*

**28%** of MSPs report  
**ransomware attacks**  
**in SaaS applications**

Of the 28%:

**64%** of MSPs report  
attacks within

 **Office 365**  
(up from 49% in 2018)

**47%** of MSPs report  
attacks within  
 **Dropbox**

**18%** of MSPs report  
attacks within  
 **G Suite**

**6%** of MSPs report attacks within Box

**2%** of MSPs report attacks within Salesforce

**SMBs report 11% to 50% of their IT infrastructure is based in the cloud.**

This is expected to increase over the next 3 years, where most expect 21% to 75% to be in the cloud.\*\*



### Geo Trend:

In **Australia and New Zealand**, **37%** of MSPs report attacks on SaaS applications, the **highest rate globally**.

\*Survey respondents were able to select multiple answer choices.

\*\*Source: Strategy Analytics' proprietary research of the North American SMB market.

## Most Common Ransomware Recovery Methods

Which methods have you used to recover a client from a ransomware infection?

**69%** of MSPs report  
**reimaging a machine**



**53%** of MSPs report  
**virtualizing the system  
from a backup image**



**37%** of MSPs report  
**running software  
to cleanup threat**

**16%** of MSPs report downloading a purpose-built software tool designed for ransomware recovery

**15%** of MSPs report relying on endpoint antivirus to recover

**12%** of MSPs report finding a decryption key

*\*Survey respondents were able to select multiple answer choices.*



**BCDR is ranked the  
#1 solution by MSPs.**



- 🏆 **Business Continuity and Disaster Recovery (BCDR)**
- ★ **Employee training**
- ★ **Patch management**
- ★ **Unified threat management**
- ★ **Identity and access management solution**
- ★ **Antivirus / Anti-malware software**
- ★ **Email / Spam filters**
- ★ **Endpoint / Mobile management platform**
- ★ **Browser isolation**
- ★ **Endpoint detection and response platform (NEW!)**



Traditional antivirus solutions are only effective for detecting threats that have been seen before, and ransomware is good at evading these detection engines. Endpoint detection and response software looks at how processes interact with an operating system, and call out or prevent activities that look and behave like malware.

**David Thomas**, Group Managing Director, Bluegrass Group Ltd

## With BCDR, Ransomware Recovery 4X More Likely Than Without



**92%** of MSPs report

that clients with BCDR products in place are **less likely to experience significant downtime** from ransomware

**With BCDR,**



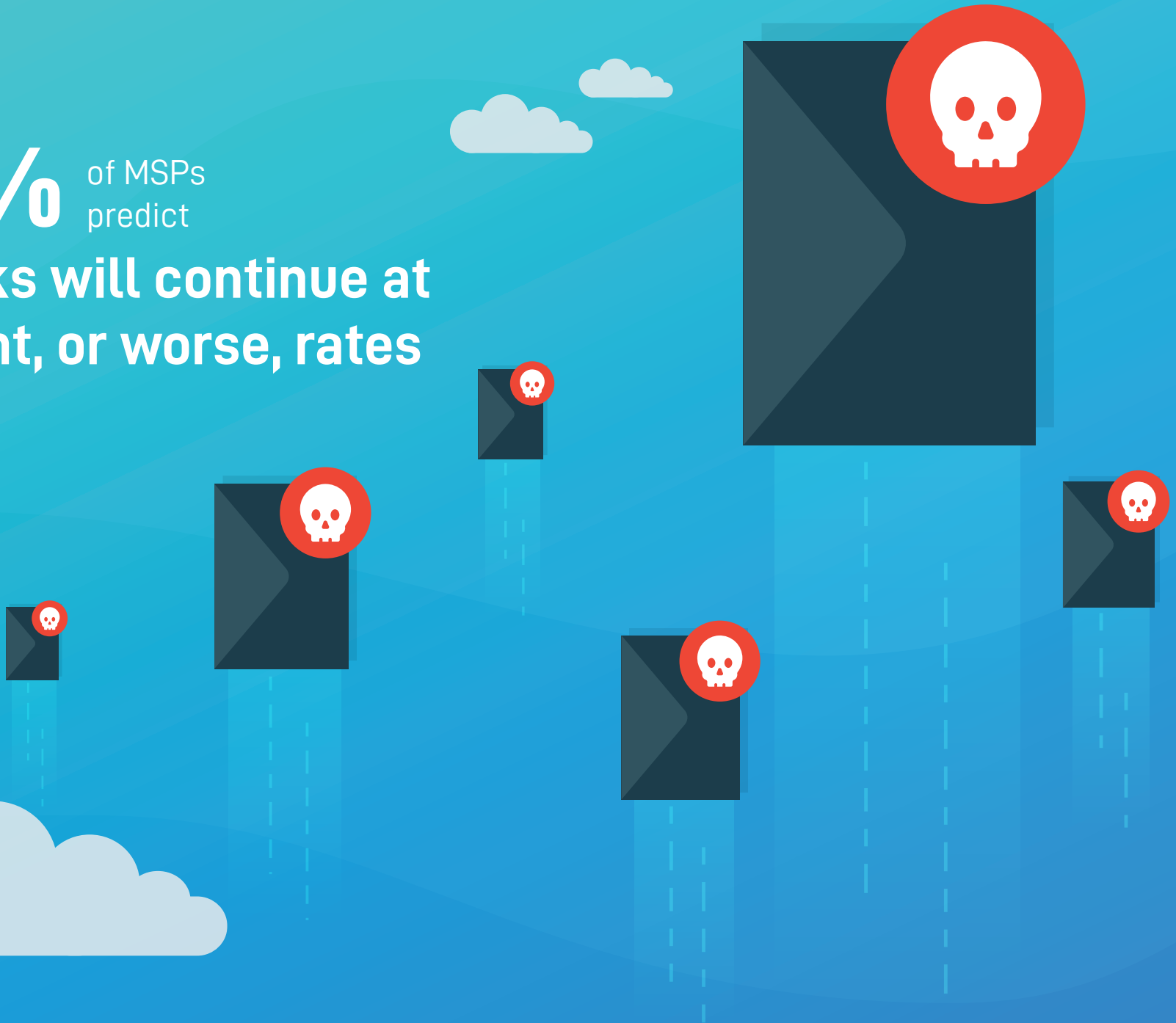
**4 in 5 MSPs** report clients **fully recovered** in 24 hours, or less

**Without BCDR,**

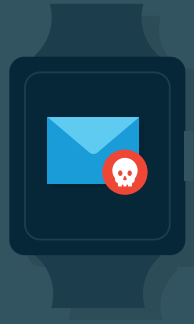


**less than 1 in 5 MSPs** report clients were able to do the same

**96%** of MSPs  
predict  
**attacks will continue at  
current, or worse, rates**



## IoT Tops the List of Future Ransomware Attack Targets



**64%** of MSPs predict ransomware will **target IoT devices**

### Why IoT?

Many of these devices aren't designed with security in mind, and cyber attackers will find ways to exploit this vulnerability. There are projected to be over 20 billion IoT devices in use by 2020, offering hackers more entry points into networks.

**Dale Shulmistra**, CEO, Invenio IT



**63%** of MSPs predict ransomware will **target social media accounts**



**56%** of MSPs predict ransomware will **capture critical utility infrastructures (e.g., power grids)**



**62%** of MSPs predict ransomware will **bankrupt whole companies**



**49%** of MSPs predict ransomware will **target users based on demographics**

## Hackers Aren't Only Targeting SMBs



# 4 in 5 agree

that MSP businesses are being  
**increasingly targeted by ransomware** attacks

But the best offense is good defense:



**60%** of MSPs  
report

carrying **cyber liability insurance** should  
they or their clients become subject to a  
ransomware attack



**50%** of MSPs  
report

having **external expertise lined up** to help  
them in the event of a large scale attack  
against them or their clients



MSPs considering purchasing  
cyber liability insurance should  
**start by checking with their  
existing insurance carrier**  
that provides their errors and  
omissions coverage to see  
what is offered.

MSPs report enabling two-factor authentication (2FA) on the following tools and applications:

**71%** Remote Monitoring and Management (RMM)



**61%**  
Password  
Manager



**56%**  
IT Documentation



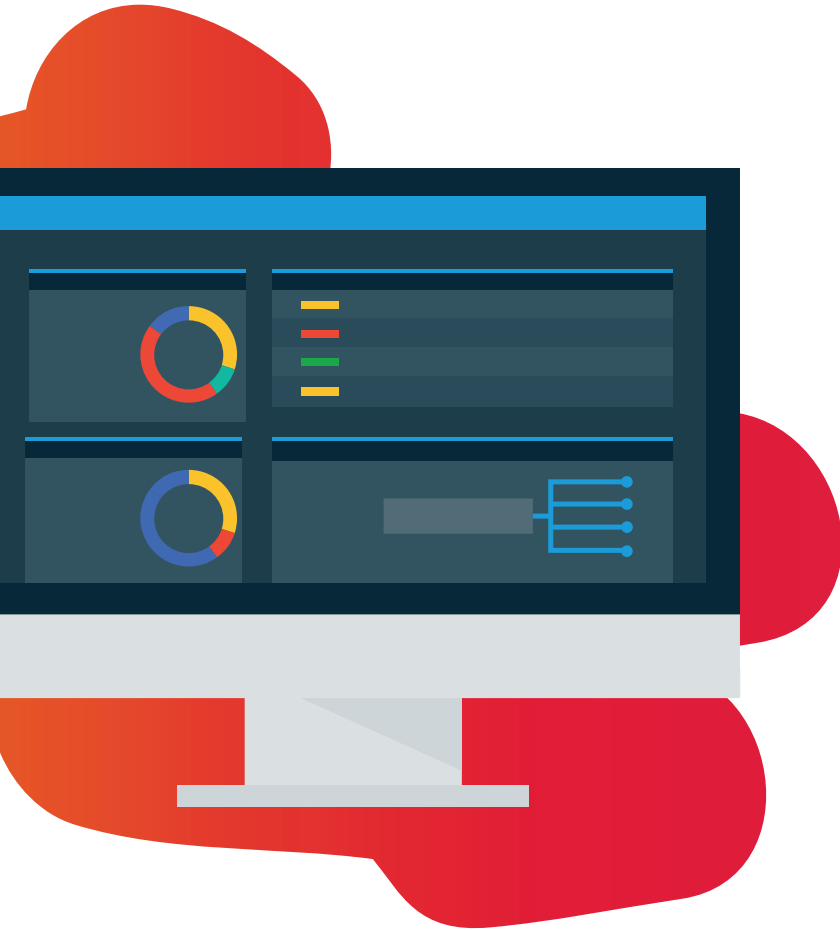
**60%**  
Email Client



**43%**  
BCDR



**58%**  
Professional Services  
Automation (PSA)



## Final Takeaways:



Businesses must prepare the front line of defense: your employees. Today's companies must provide regular and mandatory cybersecurity training to ensure all employees are able to spot and avoid a potential phishing scam in their inbox, a leading entrance point for ransomware.



Businesses must leverage multiple solutions to prepare for the worst. Today's standard security solutions are no match for today's ransomware, which can penetrate organizations in multiple ways. Reducing the risk of infections requires a multilayered approach rather than a single product.



Businesses need a continuity strategy. There is no sure fire way of preventing ransomware, although antivirus, perimeter protection, and patch management are essential. Businesses should focus on how to maintain operations despite a ransomware attack. A solid, fast, and reliable business continuity and disaster recovery solution is one part of that strategy. Since ransomware is designed to spread across networks and SaaS applications, endpoint and SaaS backup solutions designed for fast restores are also critical.



Businesses need a dedicated cybersecurity professional to ensure business continuity. SMBs often rely on a "computer savvy" staff member to handle their IT support and not an IT expert. If a company cannot afford a complete IT staff for 24/7 cybersecurity monitoring, they should be leveraging a managed service provider (MSP) who has the time and resources to anticipate and protect a company from the latest cybersecurity threats.

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