

Fighting Ransomware -Using The Power of Encryption

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Ransomware



WHAT IS RANSOMWARE?

EXPLAINED



THE WORD "RANSOMWARE" CONTAINS THE TERM "RANSOM", WHICH TRANSLATED MEANS "HELD HOSTAGE FOR MONEY". RANSOMWARE IS A MALICIOUS PROGRAM FOR DEVICES, WHICH ENSURES THAT THE DEVICE IS LOCKED FOR THE USER, AND CAN ONLY BE UNLOCKED AGAIN BY PAYING A RANSOM.



Crypto-Ransomware

Crypto-ransomware locates essential data on a computer network and encrypts it, rendering it inoperable. Attackers will then demand payment and (in theory) supply the key to unlock the files to businesses.



Locker-Ransomware

Individuals will typically see a lock screen with instructions on how to pay the ransom and a countdown clock to create urgency - with the warning that if the ransom demand is not fulfilled, the device will become permanently unusable.



Scareware

Scareware is a type of malware that uses social engineering to persuade users to purchase unwanted software by instilling fear, anxiety, or the perception of a threat.



Double-Extortion Ransomware

Double extortion ransomware is a cyberattack in which threat actors steal a victim's sensitive data and encrypt it, providing the criminal more leverage to collect ransom payments.



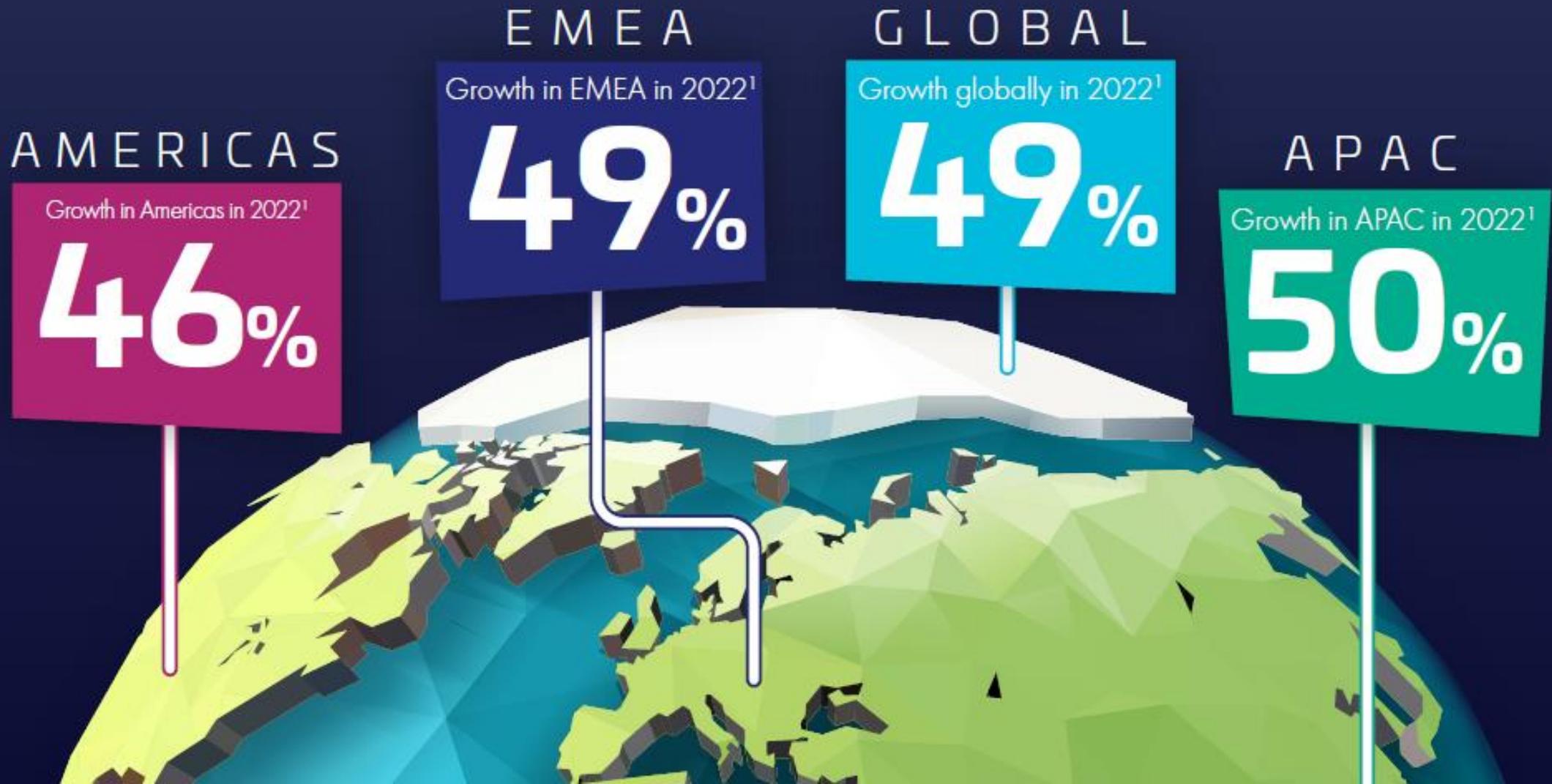
MALWARE ANALYSIS

➤➤➤➤ **STATIC**

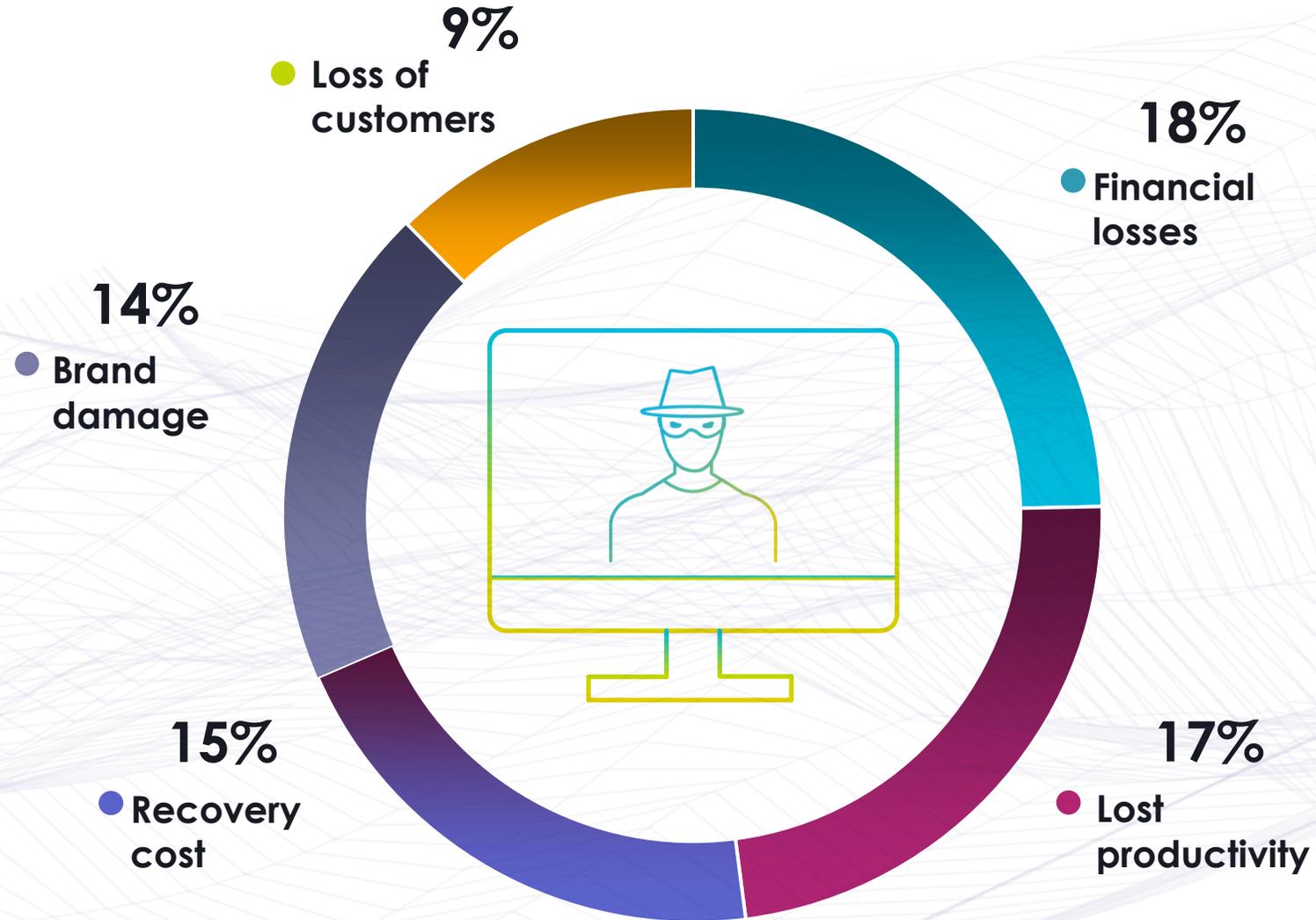
➤➤➤➤ **DYNAMIC**



Ransomware continues to experience global growth...



Business Impacts



Source: CISA-OCE Cost of a Cyber Incident: Systematic Review and Cross-Validation

Baseline Security Practices Are Falling Short



**Security Awareness
Training**



**Deploy Email/Web
Security Gateways**



**Scan for Known
Vulnerabilities**



**DNS
Security**



Techniques

- User Awareness and Training
- Patch & Config Management
- Data Backup & Recovery
- Access Control
- Phishing Defence
- Network Segmentation
- Incident Response Plan
- Partner with trusted experts

DATA
SECURITY



**ENCRYPTION
PROTECTS EVERYONE**



Encrypt First and...

Block Untrusted Binaries from Encrypting Data

By controlling access to a set of "trusted" executables that access sensitive data on systems

Prevents any rogue malware from encrypting sensitive data

Limit Privileged Access to Sensitive Data

By preventing a set of administrators to unlimited access to sensitive data on systems

Prevents malware from using privilege escalation to steal sensitive data

Monitor All Access to Sensitive Data

To satisfy Data Privacy and Regulatory Compliance requirements using data access audit logging

Prevents malware from covertly erasing its tracks to prevent detection

Strengthen your multifaceted data defenses against ransomware attacks



Detect

Exfiltration, unauthorized encryption, or impersonation



Monitor Alert or Block

Active processes rather than ransomware file signatures



Defend

With any existing or new ransomware



Manage

Simplifying and unified data security

Fighting Ransomware - Using The Power of CIPHERTrust



DISCOVER

Discover data wherever it resides and classify it

PROTECT

Protect sensitive data with encryption or tokenization

CONTROL

Control access to the data and centralize key management and policies



Thank you

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