



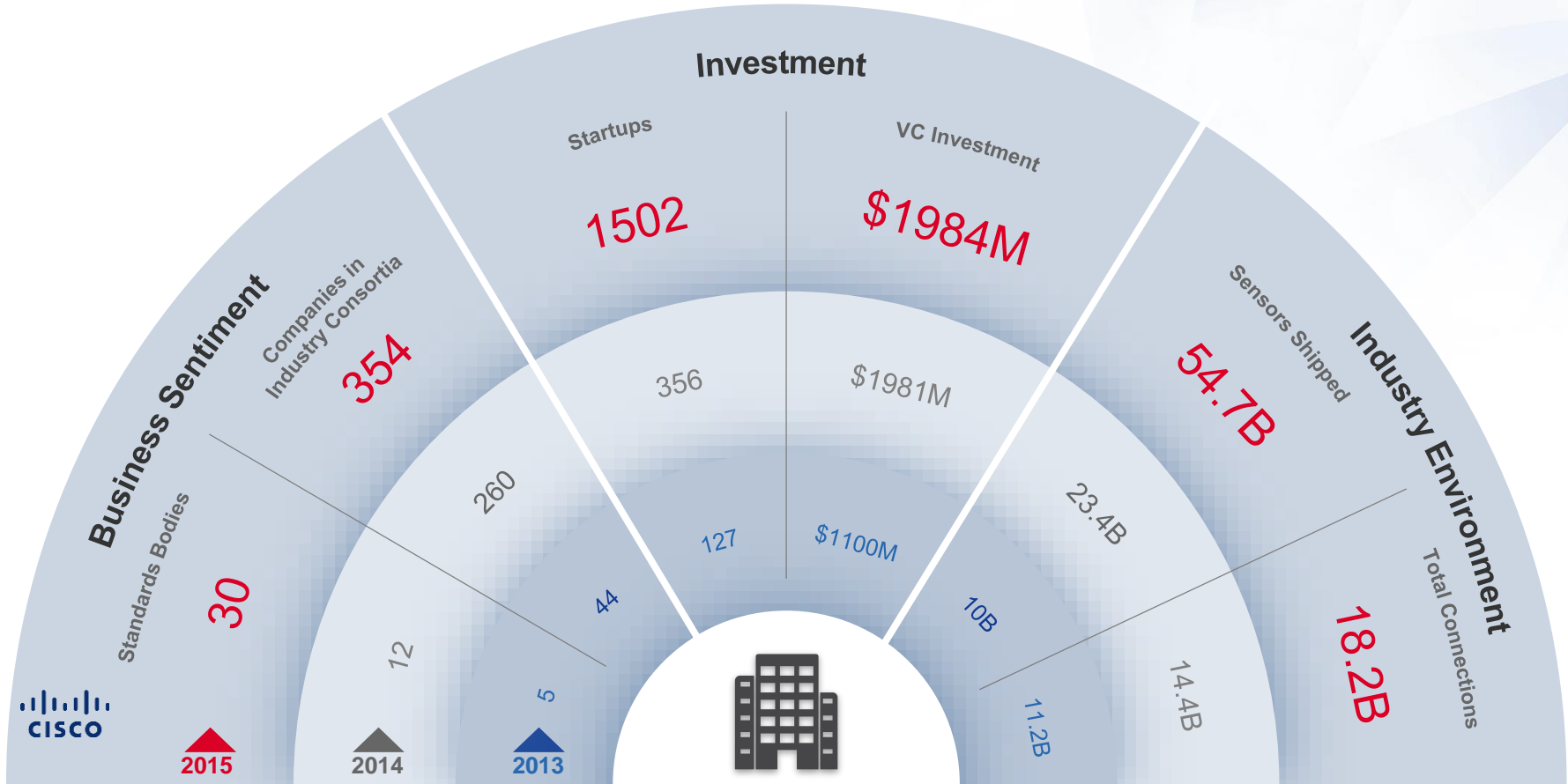
Understanding and Defending Today's Cyber Threat Landscape

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The Rise of Digitization is Upon Us



Security Weighs on the Minds of Executives



48%

Of Executives Very Concerned
About Security

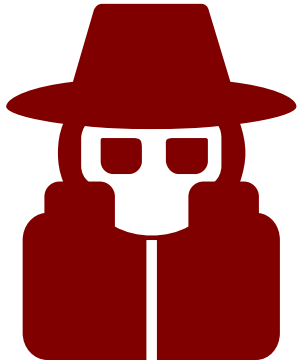
41%

Much More Concerned
Than 3 Years Ago

92%

Agreed More Information
Will Be Expected

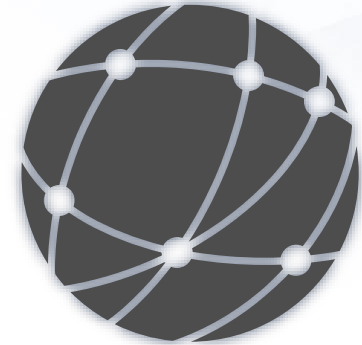
Security Challenges Calls For New Strategies



Attackers are tapping into legitimate resources, becoming adept at deploying hard-to-detect and highly profitable campaigns



Defenders confidence is declining, but awareness is driving action to deploy new strategies



Collaboration is needed to combat today's innovative and persistent attacks and develop architecture for tomorrow

Inside the Attacks

Industrialization of Cybercrime

Direct Attacks Generate Big Profits

More efficient and more lucrative



\$300

average ransom

X



317.18

ransoms paid per day

X



365

days in a year

=



\$34M

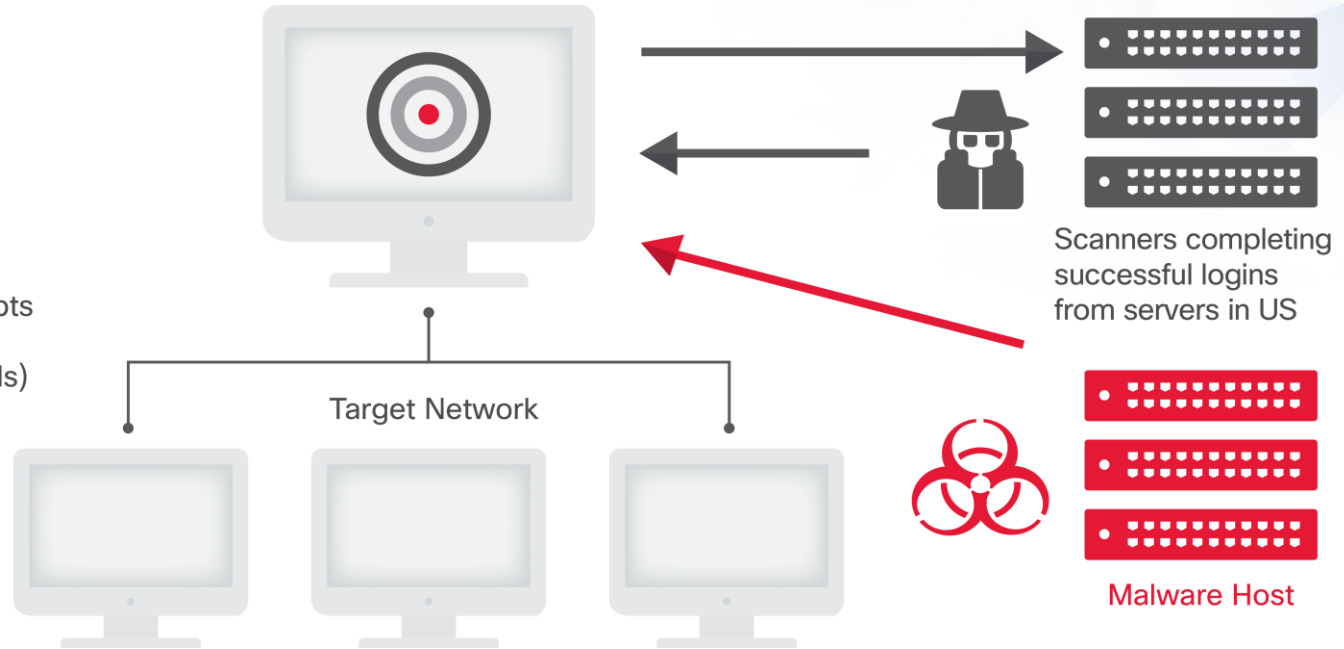
gross yearly income for
ransomware per campaign

Corralling an SSHPsycho

Global collaborative attacks



SSH brute-force attempts
from servers in China
(300K unique passwords)



Browser Infections: The Pest That Persists



More than

85%

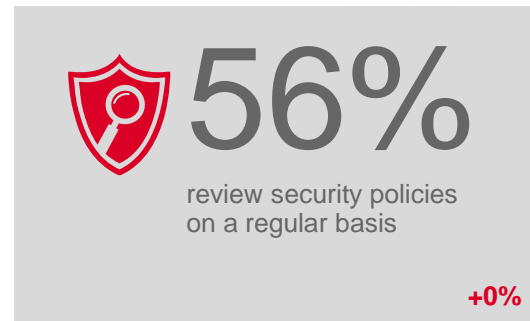
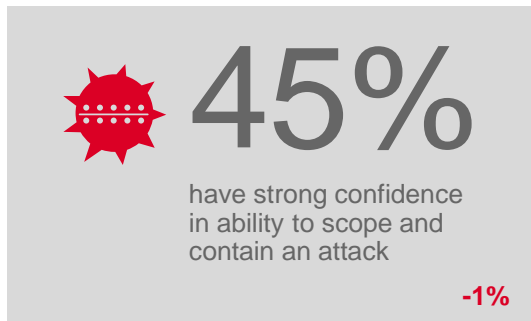
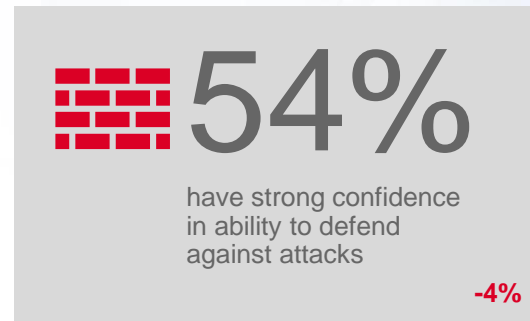
of the companies studied
were affected each month



Creating Action Through Awareness

Confidence is declining, but awareness is driving action

Attack Awareness Fades Confidence



Reliability Breeds Complacency

92%

Of devices surveyed across the Internet were running known vulnerabilities with an average of 26 each



31%

Of devices surveyed across the Internet were End of Service



5%

Of devices surveyed across the Internet were End of Life



Increased Awareness Drives Effort

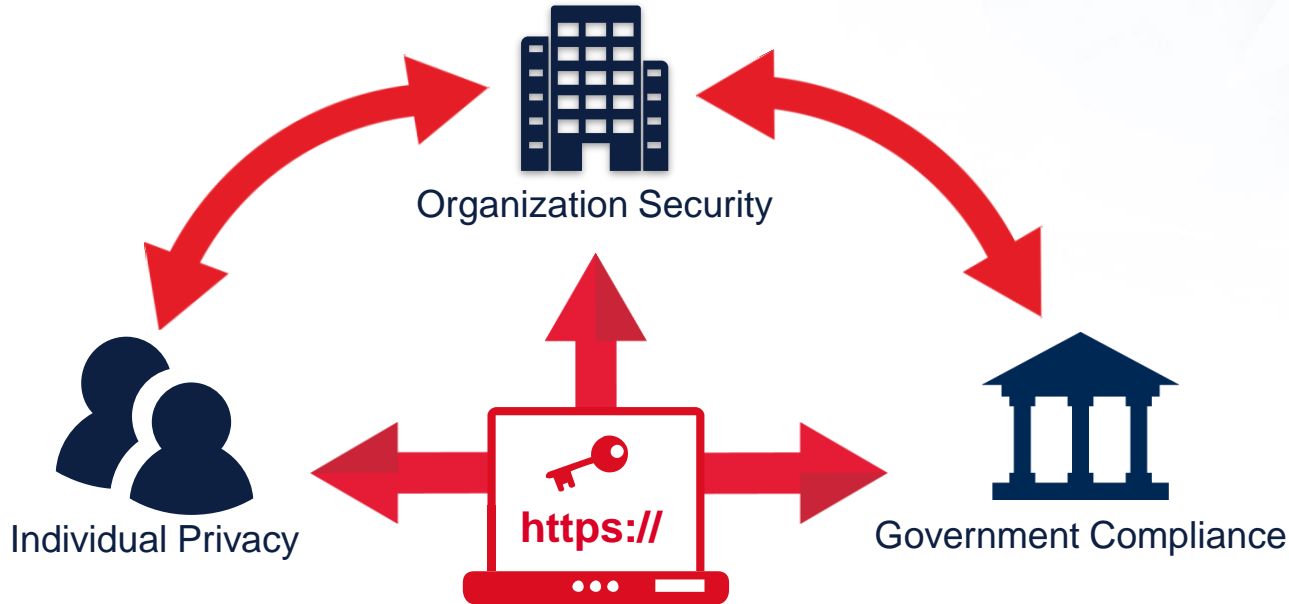
More organizations are taking actions to become more prepared for what's going to happen.

Security Awareness and Training	90%	+1%
Formal Written Policies	66%	+7%
Outsource Audit and Consulting	52%	+1%
Outsource Incident Response	42%	+7%
Outsource Threat Intelligence	39%	N/A



Encrypted Traffic: A Sign of the Times

The growing trend of web encryption creates false sense of security and blind spots for defenders



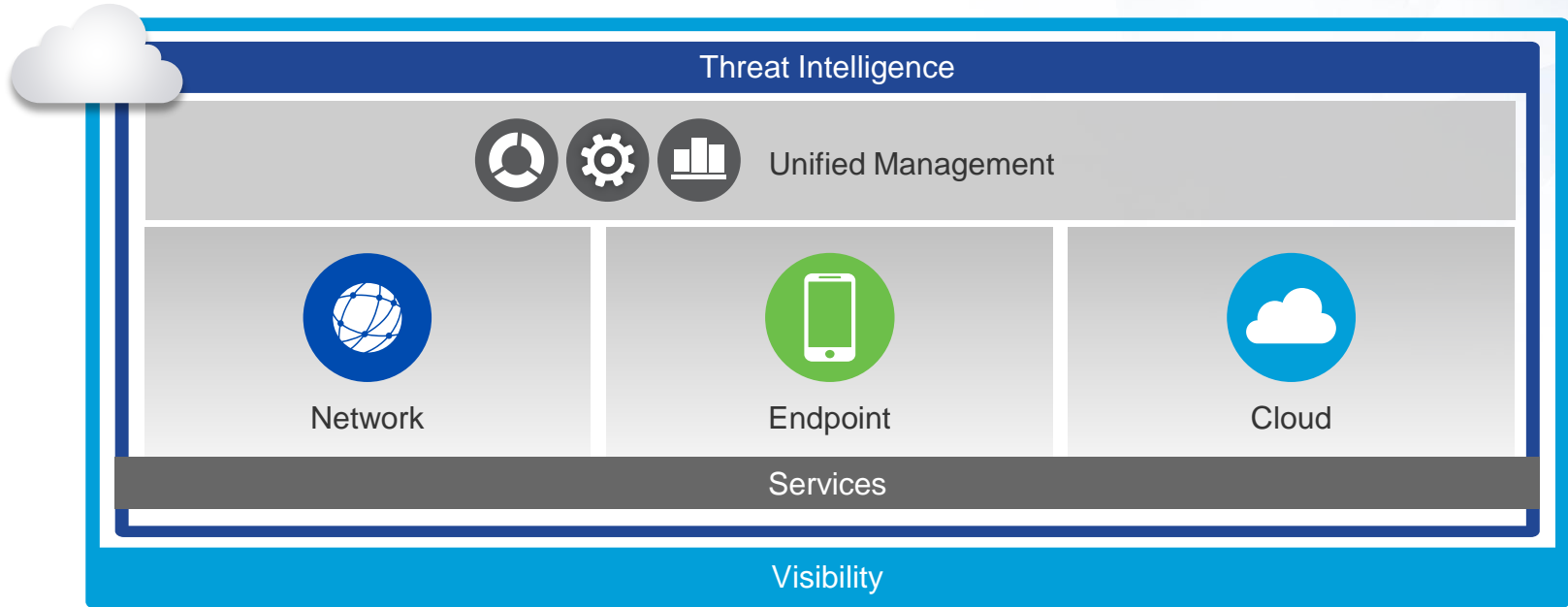
Encrypted Traffic is Increasing
It represents over 50% of bytes transferred

Integrated Approach

A New Way of Defeating Cyber Attacks



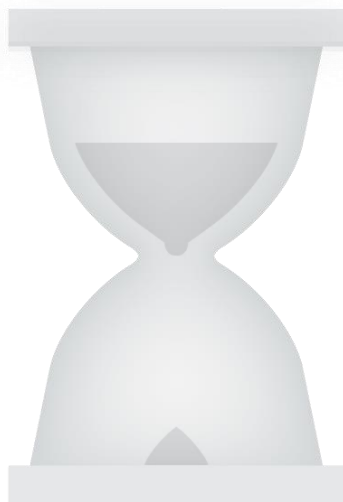
Integrated Architectural Approach



Pervasive | Integrated | Continuous | Open

Integrated Threat Defense Reduces Time to Detection

Industry Average
~100
DAYS



VS



Integrated Threat
Defense
17.5
HOURS

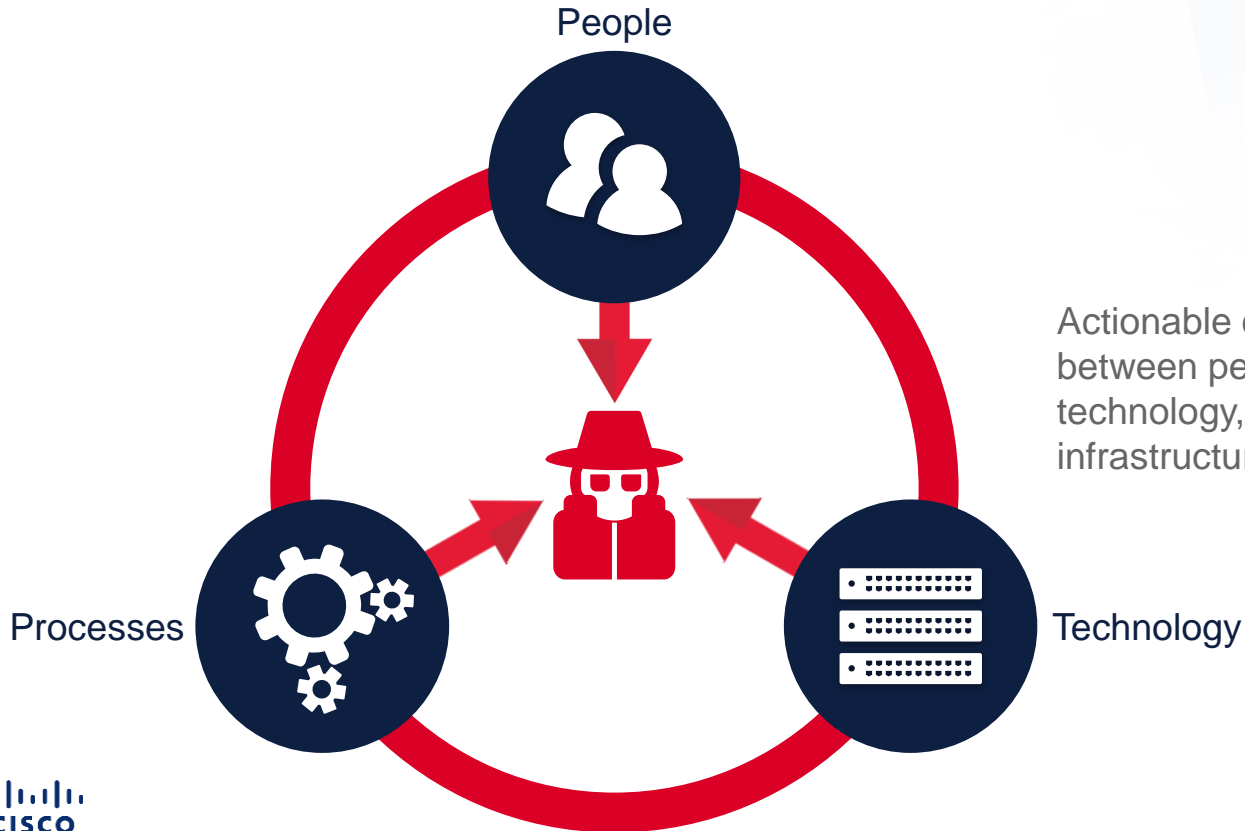
Six Tenants of an Integrated Threat Defense

1. Richer network and security architecture needed
2. Best-in-class technology alone cannot deal with threat landscape
3. Integrated threat defense can converge on encrypted malicious activities
4. Open APIs are crucial
5. Requires less gear and software to install and manage
6. Automation and coordination aspects help to reduce TTD, containment, and remediation

Bringing It Together

The background features a dark blue gradient. On the right side, there is a complex 3D geometric structure composed of various red and dark red rectangular blocks and planes. Some blocks are stacked on top of each other, while others are positioned to create a sense of depth and perspective. The lighting is soft, highlighting the edges and surfaces of the blocks.

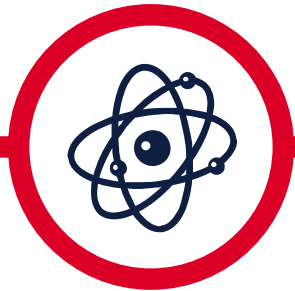
Actionable Collaboration is Critical



Actionable collaboration is needed between people, processes, and technology, and on the back-end infrastructure that attackers are using.

Trust, But Verify

Technology vendors need to demonstrate trustworthiness by:



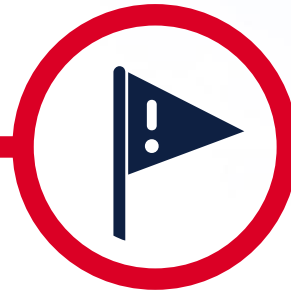
Building
Security Into
Their Solutions



Following
Policies and
Processes



Creating a
Security-Aware
Culture



Responding to
Breaches
Quickly



Providing Rapid
Remediation

2016 Annual Security Report

www.cisco.com/go/asr2016



CISCO

TOMORROW starts here.



Thank You Very Much!