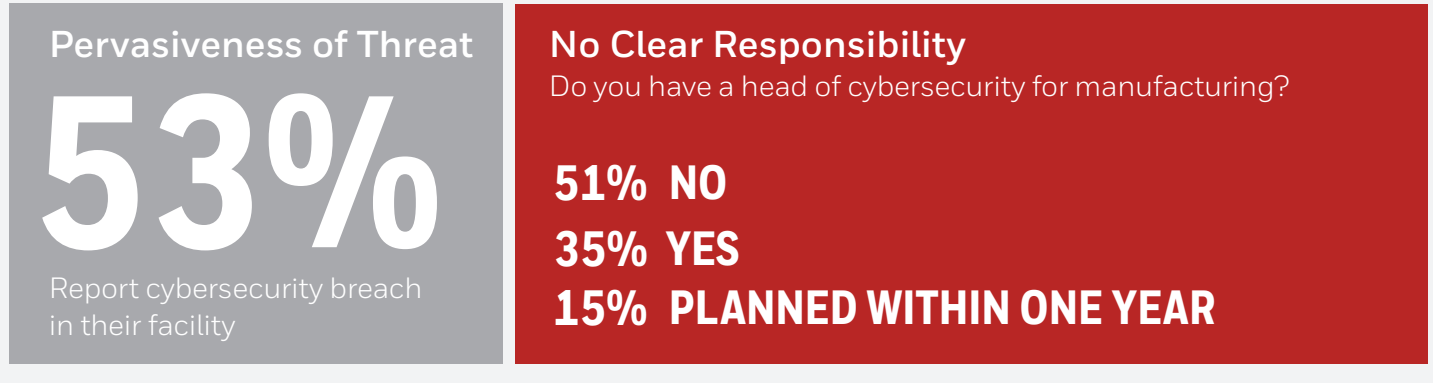# Honeywell
THE POWER OF CONNECTED

PROACTIVELY MEASURE, MONITOR AND MANAGE THE RISKS THAT MATTER MOST WITH ENTERPRISE-WIDE VISIBILITY
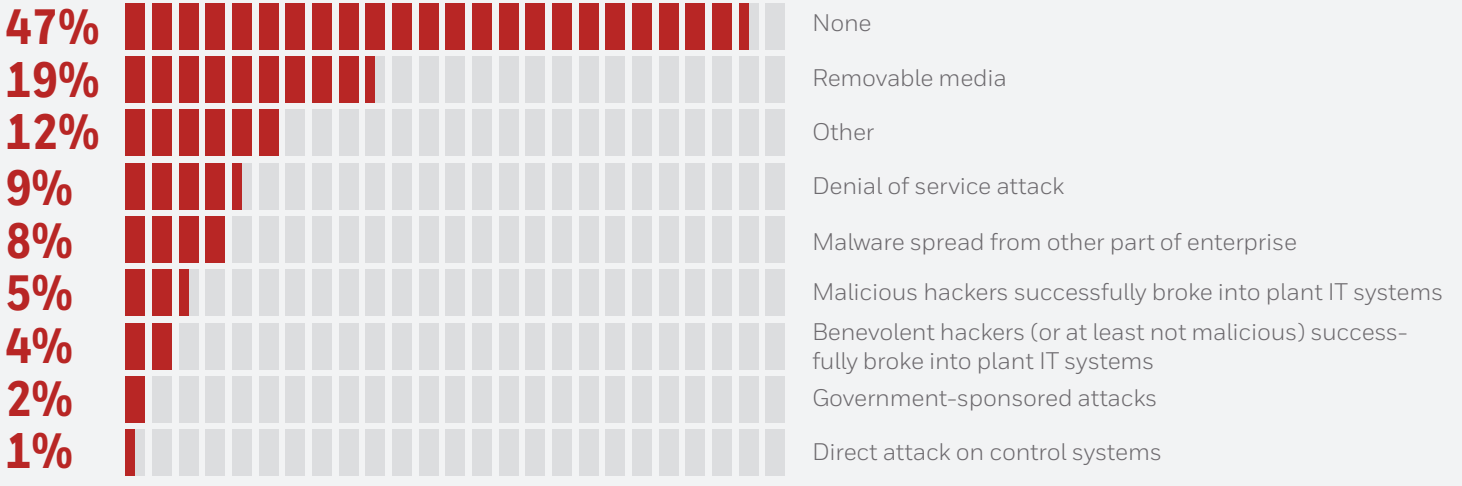
Industrial Cyber Security Risk Manager & Enterprise Risk Manager

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CYBER ASSURANCE: A MASSIVE PROBLEM
Cyber threats to industrial control systems have rapidly emerged as a key risk to safety, efficiency and continued production across the process industries.

Pervasiveness of Threat
53%
Report cybersecurity breach in their facility

No Clear Responsibility
Do you have a head of cybersecurity for manufacturing?

51% NO
35% YES
15% PLANNED WITHIN ONE YEAR

HAVE YOU HAD ANY PLANT CYBER SECURITY BREACHES? IF SO, FROM WHAT SOURCE?*

%	Source
47%	None
19%	Removable media
12%	Other
9%	Denial of service attack
8%	Malware spread from other part of enterprise
5%	Malicious hackers successfully broke into plant IT systems
4%	Benevolent hackers (or at least not malicious) successfully broke into plant IT systems
2%	Government-sponsored attacks
1%	Direct attack on control systems

* % Total Respondents, n = 130
Source: Honeywell-sponsored LNS Research Study: Putting Industrial Cyber Security at the Top of the CEO Agenda

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THE COST OF MANAGING CYBER RISK
Security breach costs are high and rising around the globe and especially in industrial sector

$15.9 MIL.*
Cyber Attack: Production loss

$1.2MIL **
Regulatory Non-compliance: Costly Penalties

*For a 16.8 downtime due to a denial-of-service attack (source: Cost of Cyber Crime Study, Ponemon Institute & Accenture, 2017, page 28.) at a 100mbps refinery plant; estimated production loss calculated based on global refining margin of $9.45/barrel (source: Q1/ 2017 gross refining margin averages from four US major oil refiners in Market Realist report, Michelle Rey, Jul 14, 2017).

** Texas' maximum penalty for violation of oil and gas pollution is $10,000 per day (source: Natural Resources Code Title 3 "Oil & Gas" Chapter 81, Railroad Commission of Texas www.statutes.legis.state.tx.us/Docs/NR/htm/NR.81.htm#81.0531.) If the same attack results an uncontrolled chemical reaction leading to a 4-month long pollution situation, the same company may incur further liability of a regulatory fine up to US$1.2mil.

EFFICIENCY GAINS: FROM 15 HOURS TO 15 MINUTES, $18,000 A YEAR
But the right tools can save companies millions.

Manual process of monitoring & measuring cyber risk

Process	Cost
Data collection (8 hours /month)	$9,600
Data normalization (3 hours /month)	$3,600
Data analysis (2 hours /month)	$2,400
Data reporting (2 hours /month)	$2,400
ANNUAL COST*	**$18,000**

What can be done to convert these to savings?

Action	Savings
Real time data collection	-$9,600
At a glance dashboard with normalized data	-$3,600
Visualized risk indicators with advisory guidance to remediate	-$2,400
Easy reports & alert notifications	-$2,400
ANNUAL SAVINGS*	**$18,000**

*assumption: $100 hourly rate

RISK MANAGER & ENTERPRISE RISK MANAGER, THE FIRST SOLUTION OF ITS KIND FOR INDUSTRIAL CONTROL SYSTEMS

Dashboard View
A single pane of glass for operations, IT & leadership

Based on industry standards (IEC62443, ISA99, ISO 27000)
A business intelligence approach for accurate risk scoring

Continuous monitoring
Real-time monitoring and measurement

Granularity for Investigation
Drill down for detailed analysis and guidance for resolution

Analysis Views
Drag-and-drop analytics for "Power Users"

Easy to Use
Translates complex cyber data into easy-to-understand terms

Dynamic Rules
Customized risk monitoring

Alert Notifications and Warnings
Notifies through e-mail alerts whenever risk issues arise

Multi-domain Support
Single Risk Manager monitoring across multiple domains

Syslog Forwarding
Securely forward syslog information to SIEM via ERM

Generate Reports on-the-fly
Cyber Health Reports for Audit Reviews, Board Reporting and Regulatory Compliance Checks

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MANAGE MULTI-SITE CYBER RISK WITH ENTERPRISE RISK MANAGER
The Enterprise Risk Manager offers powerful features to improve visibility, cut cost and simplify risk analysis and reporting across multi-sites.

Risk Manager Plant 1   Risk Manager Plant 2   Risk Manager Plant 3   Risk Manager Plant 4

Enterprise Risk Manager

To learn more, visit becybersecure.com