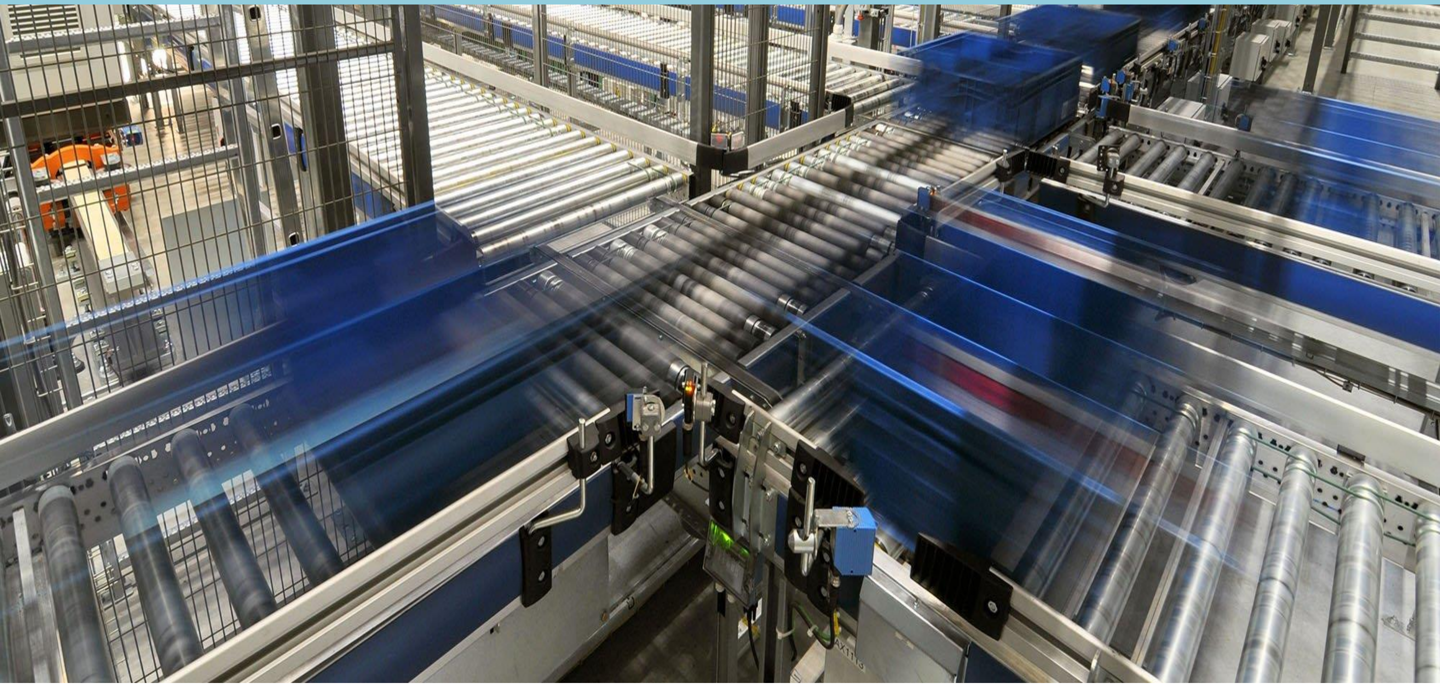
# Whitepaper

## Protecting the manufacturing with security controls

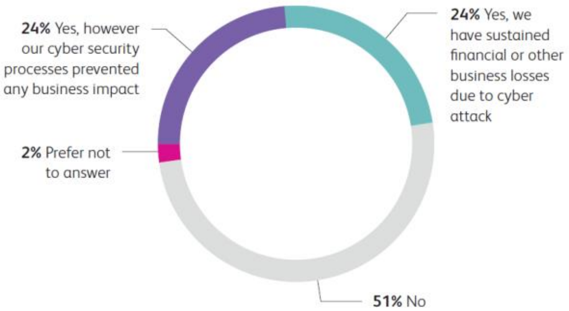
WINGO STARR GROUP



### CYBERSECURITY IMPACT TO MANUFACTURING

*A Kaspersky Labs report published in early October states that in the first half of 2017, manufacturing companies were the most susceptible to cyber threats: their computers accounted for about one third of all attacks.*

***48% of manufacturers have been subject to cyber-attack***



Source: *Cyber Security for Manufacturing, 2018, EEF*

## SUMMARY

Industrial and manufacturing companies do not consider themselves a lucrative target for cyber criminals and thus, not surprisingly, have taken fairly minor measures to secure their systems. After all, they don’t handle large volumes of online transactions, nor do they have databases filled with the details of millions of customers.

However, nearly half of manufacturers have been the victim of cyber-crime, with the sector now the third most targeted for attack, according to a report jointly published by AIG and EEF.

## INTRODUCTION

The manufacturing industry has long been a powerful force in the world economy. Manufacturers create goods people use everyday for business, recreation and to meet their basic needs.

For the manufacturing companies to survive in the digital age, companies need to address the challenges impacting security, the right security strategy is the key to survival.

There are steps manufacturers can take to protect themselves only if they understand the difference between where they’re managing cyber risks and just how much gap there is to close.

# Protecting the manufacturing with security controls

## COMPLEX PROBLEMS

As cyberattacks become more common, there's a growing concern of how to stop them.

Hackers and other cybercriminals are developing increasingly sophisticated methods to breach organizations' computer networks in order to steal data, halt operations, hold data to ransom or all of the above. Unfortunately, while the manufacturing sector has traditionally not been a target, that's no longer the case. With the rise of smart factories, hackers have more and more opportunities to gain access to your network.

The following are trends and threats to look out for in 2019, predicted by industry professionals:

### Biometric Data Theft

As biometric logins become more common, hackers will take advantage of their use as a single-factor method of authentication

### Evolving Ransomware

Ransomware has persisted for so long both because it can be used to such devastating effect and for its relative simplicity

### Phishing

Phishing is one of the most common online fraud tactics developed over the past decade and will continue in 2019

### Mobile App Malware

Mobile devices are increasingly subject to malicious activity that pushes malware apps to their phones, tablets, or other mobile devices

### IoT (Internet of Things) Attacks

Connected devices are handy for consumers and companies, but once controlled by hackers, they can be overloaded or locked down, causing havoc

### AI (Artificial Intelligence) Threats

AI offers efficiency and automation of tasks, but cybercriminals see opportunity in the technology as well, enabling them to avoid detection and circumvent security

## LAWS, DIRECTIVES AND COMPLIANCE

Malaysia, Laos, the Philippines, Thailand and Vietnam already have in place standalone cybersecurity legislation. Cambodia has a draft cybercrime law that has not come into effect yet, and Myanmar and Indonesia have each adopted laws on electronic transactions that contain provisions on cybercrime.

ASEAN is diverse, and Asia even more so. Given the varying stages of development in cybersecurity policy and laws across the region, businesses will need to track closely any laws that may be introduced or amended within each jurisdiction in which they operate.

Businesses should consider conducting cybersecurity tabletop exercises with key personnel across relevant departments to ensure that these stakeholders are well prepared and know how to respond in the event of a data incident, with a view to minimizing any resultant losses that may be suffered by the business.

External professionals should also be retained to give advice on any legal implications, for instance, regarding the provision of information to the regulator during the course of an investigation, preserving confidentiality over commercially sensitive information or claiming privilege over relevant documents.

## Cybersecurity Laws in Asia

| | | | |
|---|---|---|---|
| 🇹🇭 | Cybersecurity Act 2019 | 🇵🇭 | Cybercrime Prevention Act 2012 |
| 🇮🇩 | Regulation Number 82 of 2012<br>Provision of System and Electronic Transactions | 🇰🇭 | Cybercrime Law (drafted 2018) |
| 🇻🇳 | The Cyber Security Law 2019 | 🇲🇲 | New cyber law under consideration |
| 🇲🇾 | Computer Crimes Act 1997 | 🇱🇦 | Cyber Crime Law 2015 |

## SHORTAGE OF SKILLED PROFESSIONALS

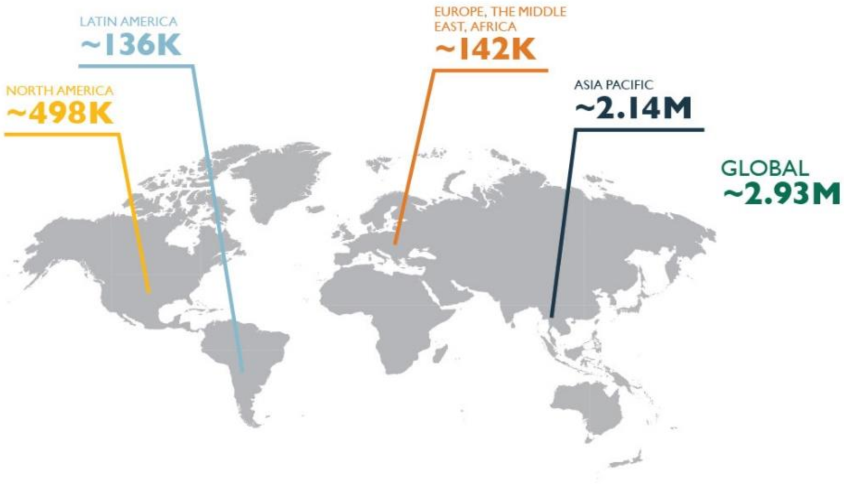
There is a growing problem is the shortage of cybersecurity workers, putting people and companies at risk.

Some companies are using the skills and professional shortage as an excuse to enable lax security strategies, causing an even greater risk for their company.

(ISC)$^2$, the world's largest association of cybersecurity professionals, predicts the cybersecurity workforce gap has increased to more than 2.9 million globally, while the Asia-Pacific region is experiencing the highest shortage at 2.14 million.

### SKILL SHORTAGES, A SECURITY RISK

*The cyber crime epidemic has escalated rapidly in recent years, while companies and governments have struggled to hire enough qualified professionals to safeguard against the growing threat. This trend is expected to continue through 2019 and beyond*



Source: (ISC)²'s Cybersecurity Workforce Study, 2018

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### CASE STUDY

*“Honda halts Japan car plant after WannaCry virus hits computer network.*
*Virus had affected networks across Japan, North America, Europe, China and other regions”*

Reuters Jun 21, 2017

### Virtual CISO – ‘vCISO’

*Businesses concerned with increasing cybersecurity risks and regulations, but having budget restrictions may want to turn ‘vCISO’ for strategic guidance*

**Our team of experts have decades of experience in building information security programs that work with business objectives and show measurable improvement to security posture**

## SECURING CORPORATE DATA

Managing cybersecurity in today’s world is almost indescribably difficult. What was once only the computer and maybe even storage media, has now ballooned into the internet.

As all these becomes a part of how we work and interact, the points that information can be compromised increases.

While there are IT employees who may have a hold on security tool implementations, these roles are a technical "generalist”. What you really need is a security specialist, a Corporate Information Security Officer (CISO), capable of prioritizing both the business and the security of information, infrastructure, sensitive data and your public reputation, and minimizing the risks to all of these before a breach occurs.

## MINIMIZE EXPOSURE TO SECURITY THREATS WITH VIRTUAL CISO

With Cyber security continuing to affect organizations from large enterprises to small and medium business’s (SMB) the role of a CISO is becoming more important than ever.

In order to protect the corporate data and comply with regulatory requirements, companies should employ a dedicated CISO, but for many SMBs and budget conscious companies, a full time CISO is beyond their budget.

***A virtual CISO – ‘vCISO’ may be the solution for you***

vCISO is an outsourced information and cyber security practitioner/provider who offers their knowledge and insight to an organization on an on-going or on-demand basis.

The service is designed to make top-tier security experts available to organizations who need security expertise and guidance. The following are some of key measures to keep your information secure and protected from cyber threats:

- Starting a cybersecurity risk assessment based on your organization’s assets
- Building a cybersecurity plan and program
- Building a Governance, Risk and Compliance (GRC) program
- Focusing on people including managing personnel, contractors and/or vendors
- Building and executing a training strategy