



# Emerging use cases and greater cloud adoption are driving encryption strategies in Southeast Asia

## 2019 Southeast Asia Encryption Trends Study

July 2019

[www.ncipher.com](http://www.ncipher.com)



Over 5,800 IT and IT security practitioners in Australia, Brazil, France, Germany, India, Japan, Mexico, Middle East, Russian Federation, South Korea, United Kingdom, United States and, for the first time, two new regions in Asia: Southeast Asia and Hong Kong and Taiwan.

268 respondents in Southeast Asia, which includes Indonesia, Malaysia, Philippines, Thailand and Vietnam.

The research examines how the use of encryption has evolved over the past 14 years, and the impact of it on the security posture of organizations in the face of today's most pressing data protection challenges.

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# Agenda

- **Broad encryption trends 2019**
- **Cloud use and emerging use cases are driving technology adoption**
- **Encryption drivers and challenges**
- **The role of HSMs**
- **Recommendations & conclusions**

# Global companies continue to apply encryption more consistently

Steady rise over 14 years

Maturity varies across regions

Enterprise-wide use of encryption has increased



**45%**

of organizations worldwide now have a consistent, enterprise-wide **encryption strategy**



**67%**  
Germany



**33%**  
Southeast  
Asia



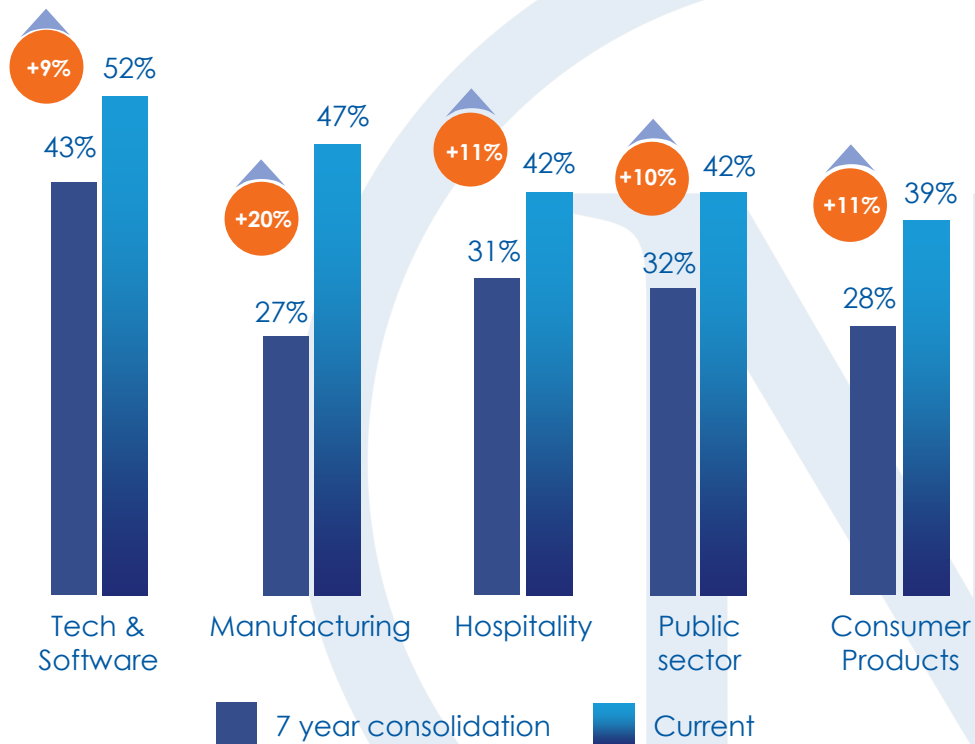
**26%**  
Brazil

# Encryption by industry - Global

Continued growth across sectors

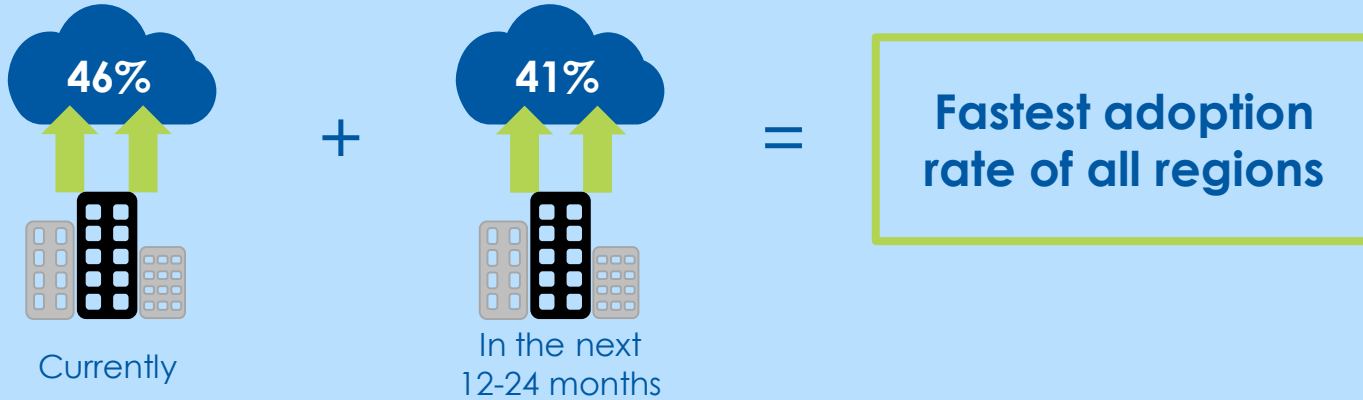
Largest increase in Manufacturing

More focus on protecting personal information



# Cloud momentum – Southeast Asia

Do you transfer sensitive or confidential data to the cloud?



of organizations in Southeast Asia plan to use HSMs to generate and manage BYOK keys for public cloud encryption (15% higher than the global average).



of organizations in Southeast Asia use only **keys controlled by their organization** when encrypting data at rest in the cloud (7% higher than the global average).

# Investments to address emerging security use cases

Organizations in Southeast Asia are addressing emerging use cases ahead of global averages

29% of organizations **plan to deploy HSMs** for Blockchain applications in the next 12 months. **Highest of all regions**

29%



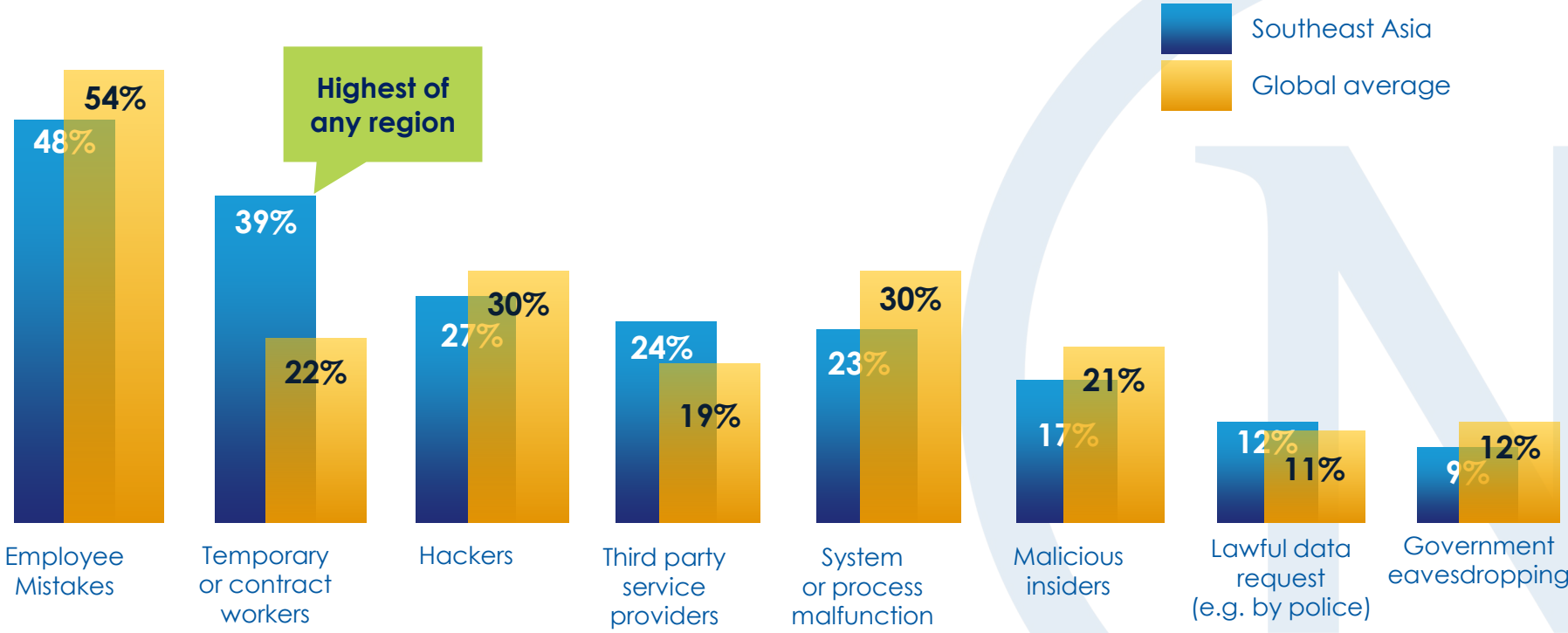
When choosing encryption solutions, 65% of organizations look for solutions that support emerging algorithms (e.g. ECC). **8% higher than the global average**

65%



# Threats to sensitive/confidential data – Southeast Asia

What are the main threats that might result in the exposure of to sensitive or confidential data?





# Encryption drivers – Southeast Asia

What are the reasons why your organization encrypts sensitive and confidential data?

To protect enterprise intellectual property

60%

6% higher than the global average

To protect against specific, identified threats

53%

2<sup>nd</sup> highest reason

# Encryption challenges – Southeast Asia

Highest rate of challenge with deploying encryption technology

Less trouble with data discovery

Higher comfort level with classifying data to encrypt

## Biggest challenges in planning and executing a data encryption strategy

More than one choice permitted

Discovering where sensitive data resides in the organization

65%

Global avg: 69%

Initially deploying the encryption technology

57%

Determining which encryption technologies are most effective

26%

Global avg: 42%

Classifying which data to encrypt

22%

Global avg: 32%

Ongoing management of encryption and keys

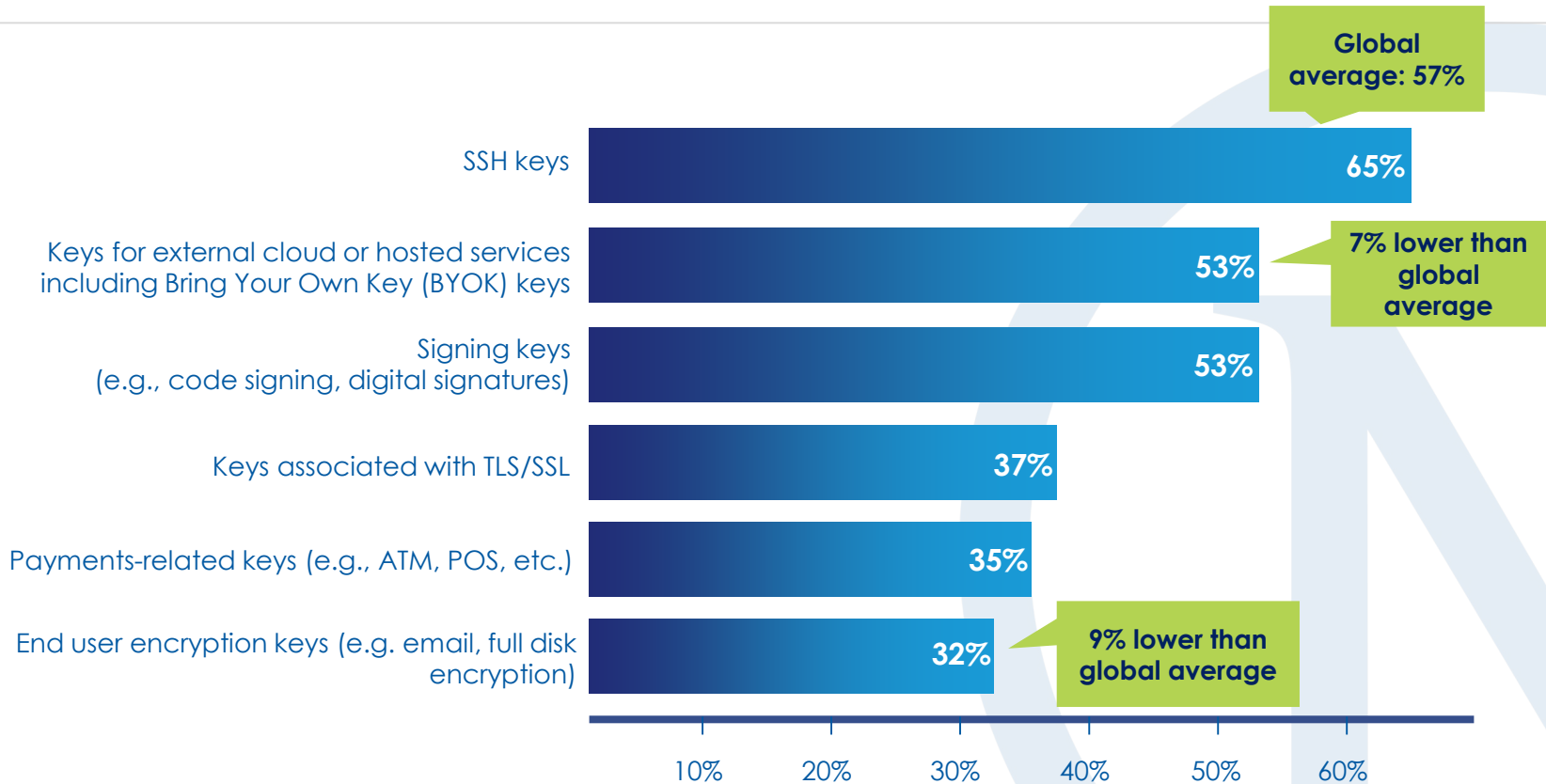
19%

Training users to use encryption appropriately

10%

10% 20% 30% 40% 50% 60%

# What keys are hardest to manage? Southeast Asia



# The role of HSMs

# The role of Hardware Security Modules (HSMs)

Highest level of protection for encryption or signing keys

Implement and enforce policy

“Harden” applications that use cryptography

Source of high quality randoms/keys



A Hardware Security Module (HSM) is a certified, trusted platform for performing cryptographic operations and protecting keys

# Adoption of HSMs – Global / Southeast Asia

## Global



**47%**  
of organizations  
use HSMs

## Southeast Asia



**36%**  
of organizations  
use HSMs



# Overall importance of HSMs is growing

How important are HSMs to your encryption or key management strategy?

'Very important' and 'Important' responses combined



# Conclusions and recommendations

Expand encryption footprint,  
even if only incrementally

Evolve security in line with  
business models

Encryption for data security,  
HSMs for application protection

The keys are the key



Download the study

[www.ncipher.com/seacts](http://www.ncipher.com/seacts)



**Thank You**

