



**BADAN SIBER  
DAN SANDI  
NEGARA**

## Virtual Policy Convening

**Cybersecurity and MSMEs:  
Policy Implications in Asia and the Pacific**

December 7<sup>th</sup>, 2021

# We & MSMEs

## Cybersecurity for Indonesian MSMEs

**Edit Prima**

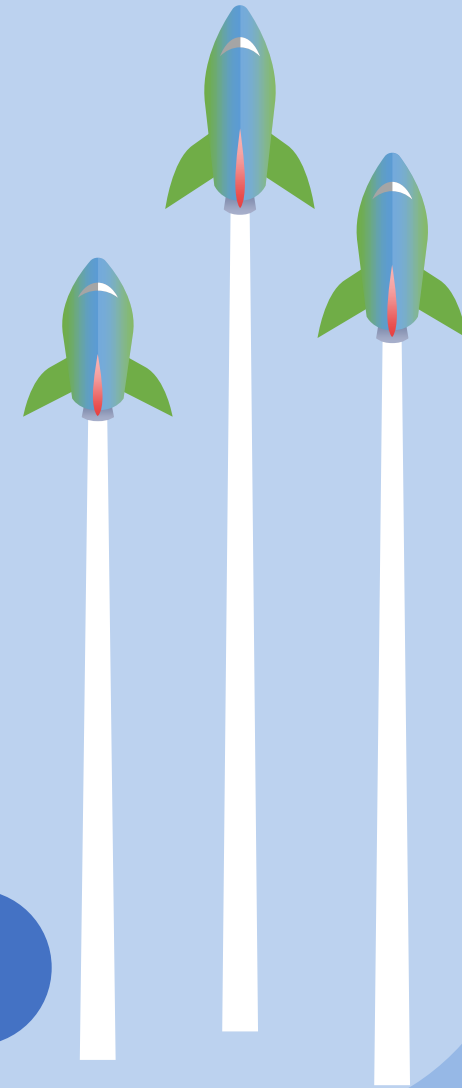
National Cyber and Crypto Agency  
Directorate of CSS for FTT Sectors





# Background

- 1 MSMEs is a main pillar of the Indonesian economy since they are 99% of Indonesian business doers that contributes to 61.07 % of Gross Domestic Product
- 2 In May 2021, the Indonesian E-Commerce Association mention that 13.7 of 64.1 million MSMEs (21.37% ) already using online platforms in marketing their products.
- 3 Indonesian government encourages SMEs to go online through the SME Go Online program
- 4 This is in line with President Joko Widodo's directives regarding acceleration digital transformation, especially for MSMEs






# Cyber Attacks that target MSMEs

**28%**  
**CYBER ATTACKS  
TARGET MSMEs**

 **14%**  
MSMEs have a  
solution to overcome  
cyber attacks

 **HACKING**  
**45%**

 **22%**  
**SOCIAL  
ENGINEERING**

 **17%**  
**CONFIGURATION  
ERROR**

 **8%**  
**ACCOUNT  
ABUSE**

 **22%**  
**MALWARE**

 **FINANCIAL  
LOSS**

 **60% BANKRUPT** → **CYBER  
ATTACK**  
**MSMEs ACTORS**

Sources:

- CNBC
- DBIR Verizon 2020



# The Impact of Cyber Attacks on MSMEs



**MSMEs become the easy targets for cybercriminals**



**Cyber Incident Occurrence**



## The Impacts including:

- 1 Damage to information or information systems
- 2 Fine of Regulations or legal fees
- 3 Decreased productivity
- 4 Losing important information in running business
- 5 Poor reputation or loss of customer trustworthiness
- 6 Difficult to get a loan from the bank or investors
- 7 Loss of business income



# Information Security Awareness for MSMEs

- ❑ To protect MSMEs data and assets
- ❑ Ensuring every activity runs safely
- ❑ Can prevent cyber attacks



**Minimizing risks and protecting data and information from cyber threats that can result in losses to MSMEs both financially and non-financially, so that their business activities can run safely and smoothly.**

## The Principles of Cybersecurity Culture

- 1) Use Indonesian culture both in the real world and in cyberspace
- 2) Recognize and understand technology, align it with the needs
- 3) Always be alert and careful in the cyberspace
- 4) Develop digital literacy skills
- 5) Apply information security governance

(Government Regulation 71 - 2019 Article 94 paragraph 1)





# PAMAN KAMI: BSSN Solution

## DEFINITION

PAMAN KAMI stands for “Penilaian Mandiri Keamanan Informasi” (Information Security Self Assessment).

Tools for assisting MSMEs to measure the level of application of information security when they already using online platforms in running their business (Go Online)

## PURPOSE

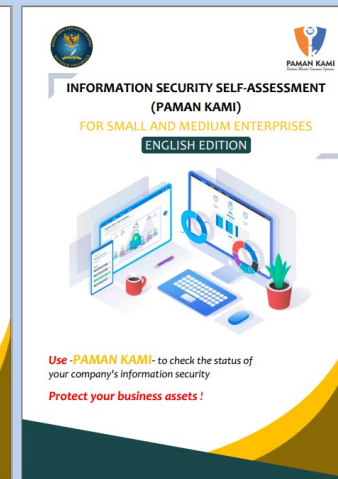
PAMAN KAMI can be used as a first step to measure the level of information security in MSMEs so that cyber attack incidents can be better prevented and minimized

## BENEFIT

MSMEs can build and develop their businesses smoothly and safely from cyber attacks in order to realize national security and increase national economic growth



BILINGUAL EDITION



ENGLISH EDITION

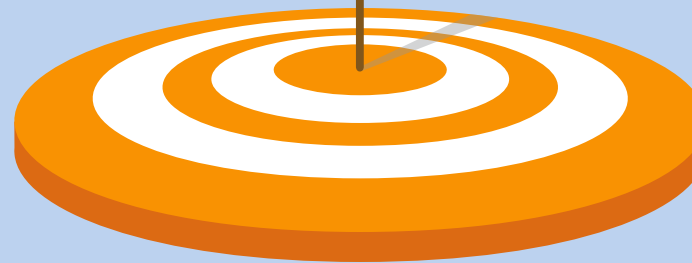


INDONESIAN EDITION

*NISTIR 7621 Revisi 1 about Small Business Information Security: The Fundamentals*



<https://bssn.go.id/paman-kami/>





# Cybersecurity Law In Indonesia



**Act 11 – 2008:  
Electronic Information and  
Transactions**



**Presidential Regulation 95 – 2018:  
Electronic-based Government  
Systems**



**GR 71 – 2019:  
Implementation of Electronic  
Systems and Transactions**



**Presidential Regulation 39 – 2019:  
One Indonesian Data**



**GR 80 – 2019:  
Trading using Electronic Systems**

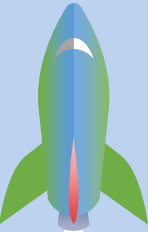


**Presidential Decree 28 – 2021:  
National Cyber and Crypto Agency**



**Presidential Regulation 74 – 2017:  
e-Commerce Roadmap**

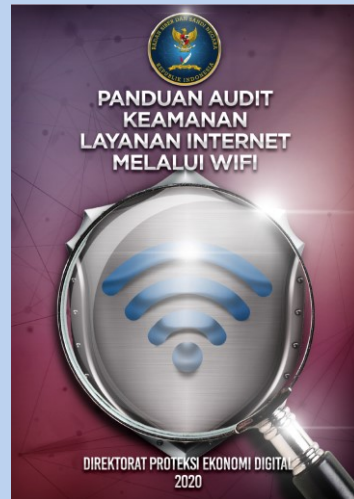
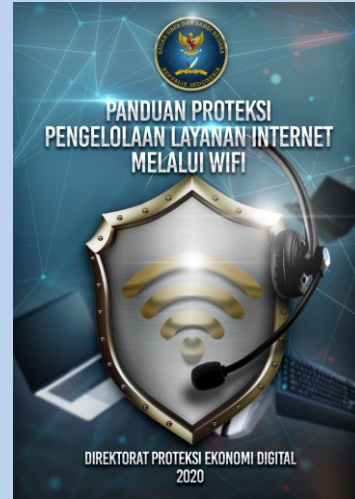
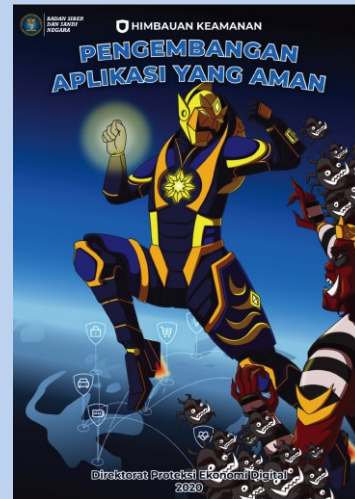
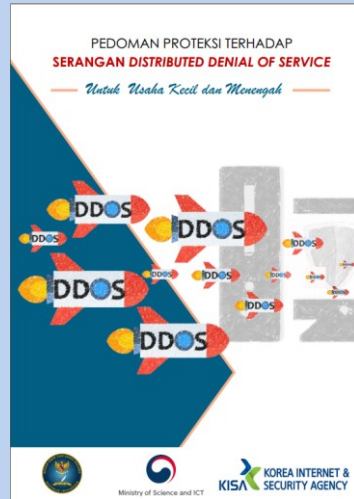
# BSSN Program in supporting MSMEs



Collaborating with stakeholders in supporting the digitization of MSMEs



Publication of policies and/or guidelines as a guide for MSMEs



Information Security Literacy Program for MSMEs



Competency Improvement Program and Measurement of Information Security Awareness Levels for MSMEs continually





# BSSN collaboration with Stakeholders

- ❑ BSSN together with the Ministry of Cooperatives and SMEs has join in the Program of Accelerating Digital Transformation for SMEs as well as a part of Single SMEs Database Development Task Force;
- ❑ BSSN with the top Indonesian marketplace companies (Tokopedia, Bukalapak, etc) has collaborate in providing information security literacy to the public. Currently, BSSN collaborate with Grab to provide security literacy in the Grab Academy program that target the Grab-assisted MSMEs.
- ❑ BSSN has involved together with Ministries/Agencies, the private sector, and the community in drafting and issuing process of regulations and policies related to MSMEs.
- ❑ BSSN together with the Coordinating Ministry for Economic Affairs and other Ministries/Agencies has prepare the Establishment of a Digital Economy Development Project Management Office (PMO).
- ❑ BSSN officers and experts become a speaker at many events organized by the government, the private sector and the community in order to increase knowledge of information and cyber security.





# BSSN Efforts to realize National Cyber Sovereignty and Economic Prosperity

BSSN prepares the National Cyber Security Strategy (NCSS) as a reference for all national cyber security stakeholders in compiling and developing cyber security policies in their respective agencies. NCSS is prepared in accordance with the basic values of the life of the nation and state, namely: Sovereignty, Independence, Security, Togetherness, and Adaptiveness.

The vision of NCSS is “TO REALIZE NATIONAL CYBER SECURITY, PROTECTION AND SOVEREIGNTY AND INCREASE NATIONAL ECONOMIC GROWTH”

The strategic objectives of the NCSS are the achievement of cyber resilience, public service security, cyber law enforcement, cyber security culture and cyber security in the digital economy.

BSSN has also compiled a “BSSN Roadmap Towards a Sovereign Indonesian Cyber 2019–2045” which is divided into three periodizations, namely, Stabilization, Integration, and Independence, to welcome the celebration of one century of independent Indonesia as a developed country in the world.

**Thank You**