

Developing & Building Cyber Security & Resiliency Awareness Through Multi-Stakeholder Engagement

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KEY STATISTICAL INDICATORS FOR THE WORLD'S INTERNET, MOBILE, AND SOCIAL MEDIA USERS

we
are
social

URBANISATION:
54%


PENETRATION:
50%



PENETRATION:
37%



PENETRATION:
66%



PENETRATION:
34%

SOURCES: POPULATION: UNITED NATIONS; U.S. CENSUS BUREAU; **INTERNET:** INTERNETWORLDSTATS; ITU; INTERNETLIVESTATS; CIA WORLD FACTBOOK; FACEBOOK; NATIONAL REGULATORY AUTHORITIES; **SOCIAL MEDIA AND MOBILE SOCIAL MEDIA:** FACEBOOK; TENCENT; VKONTAKTE; LIVEINTERNET.RU; KAKAO; NAYVR; NIKI AGHAEI; CAFEBAZAAR.IR; SIMILARWEB; DING; **EXTRAPOLATION OF TNS DATA:** **MOBILE:** GSMA INTELLIGENCE; **EXTRAPOLATION OF EMARKETER AND ERICSSON DATA:**



A Multi-Stakeholder Approach to Cyber Security Awareness Jogjakarta, September 7th, 2017

Portrait Of The Global Digital Citizen

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Indonesia Digital Challenges: Snapshot

DIGITAL in INDONESIA

TOTAL
POPULATION



256,2M

BY GENDER

47,5%



52,5%

TOTAL
PENETRATION



132,7M

INTERNET USERS
IN JAVA ISLAND



86,3M
65%

Source: APJII 2016

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Indonesia Digital Challenges: Connectivity

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Indonesia Digital Challenges: Why Connect?

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Indonesia Digital Challenges: Online Behavior

INFOGRAFIS

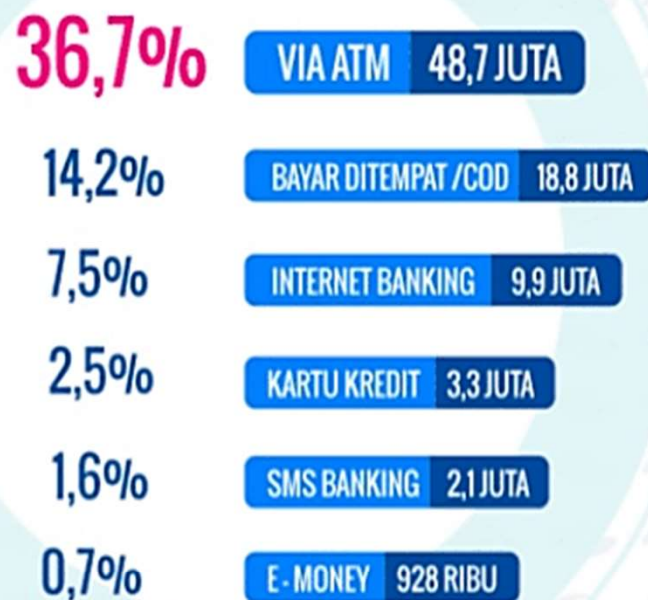
HASIL SURVEY 2016



PERILAKU PENGGUNA INTERNET INDONESIA



TEKNIS PEMBAYARAN TRANSAKSI ONLINE



FREKUENSI TRANSAKSI ONLINE



Diterbitkan November 2016. Hasil survey terbitan sebelumnya mohon diabaikan. Untuk hasil survey lebih mendalam silakan email ke survei@apjii.or.id | Copyright © APJII 2016. Halaman 26 dari 34

Indonesia Digital Challenges: Online Frequencies

INFOGRAFIS

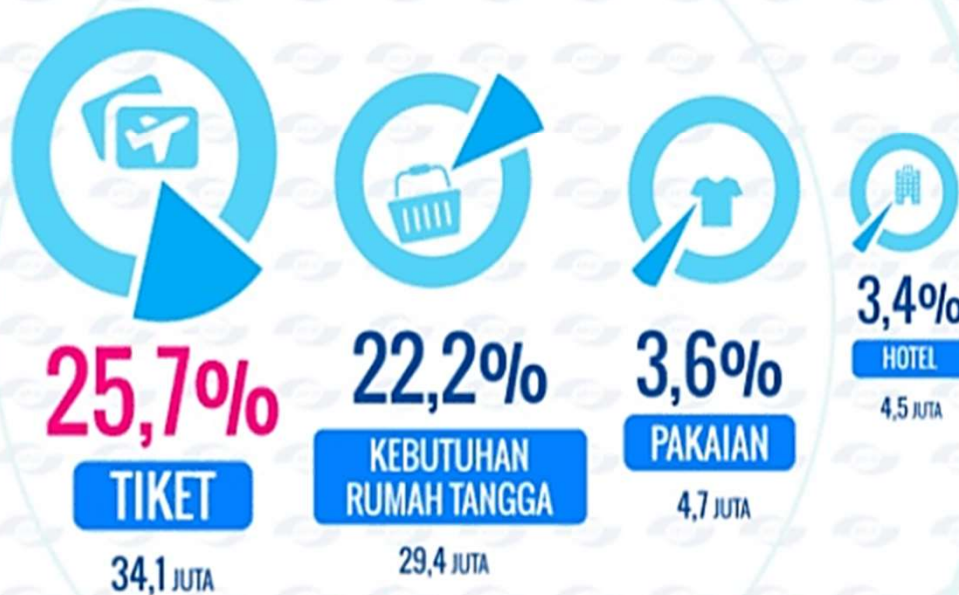
HASIL SURVEY 2016



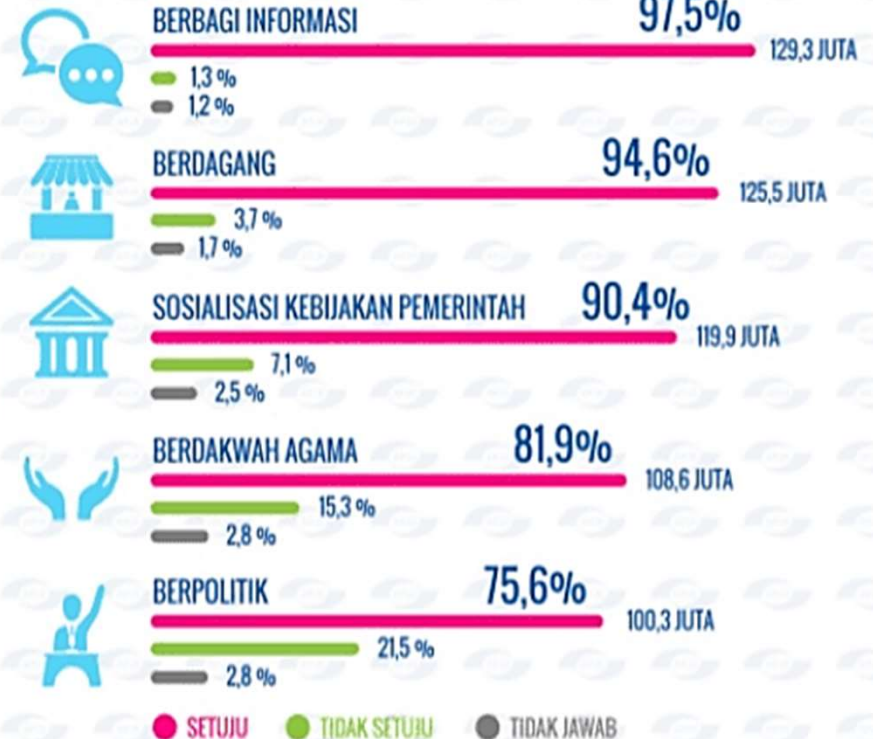
PERILAKU PENGGUNA INTERNET INDONESIA



BELANJA ONLINE YANG PERNAH DILAKUKAN



MEDIA SOSIAL BAGI AKTIFITAS

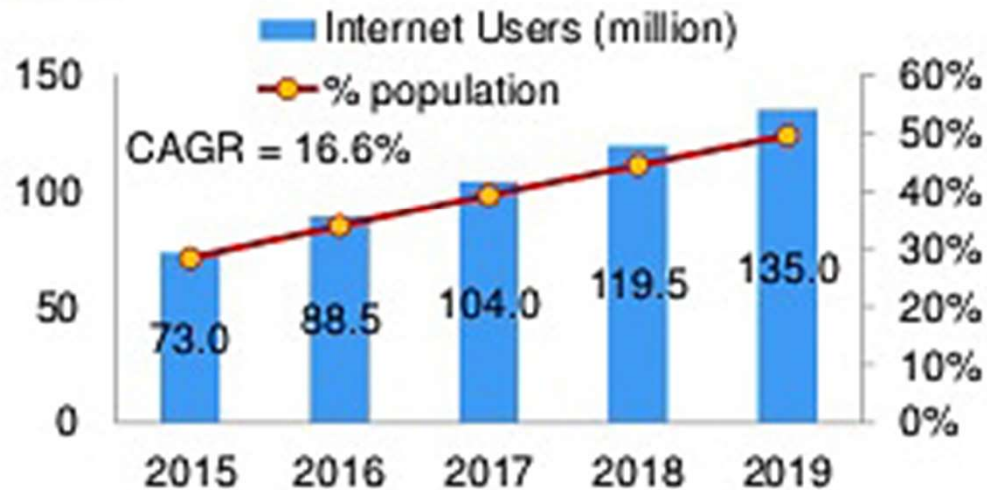


Diterbitkan November 2016. Hasil survey terbitan sebelumnya mohon diabaikan. Untuk hasil survey lebih mendalam silakan email ke survei@apjii.or.id | Copyright © APJII 2016. Halaman 27 dari 34

Indonesia Digital Challenges: Other Determinant Factor



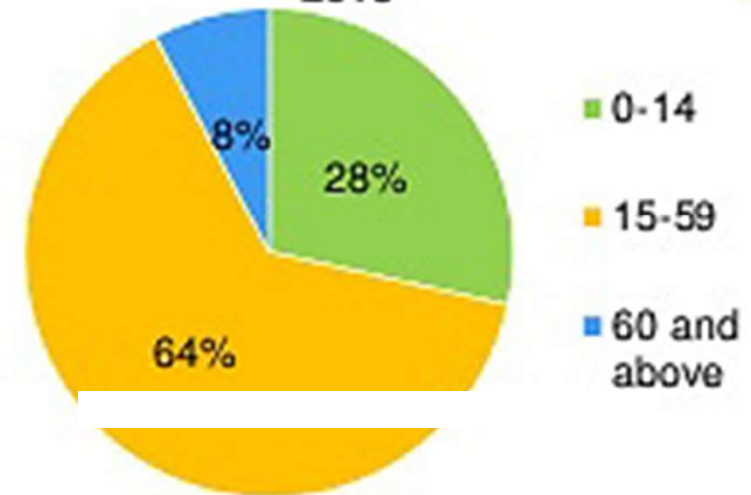
Indonesia Internet User Forecast



Real GDP & Disposable Income Level



Indonesia Population by Age Group, 2013



Sumber: Frost & Sullivan

Indonesia Digital Challenges: Cyber Risks & Issues



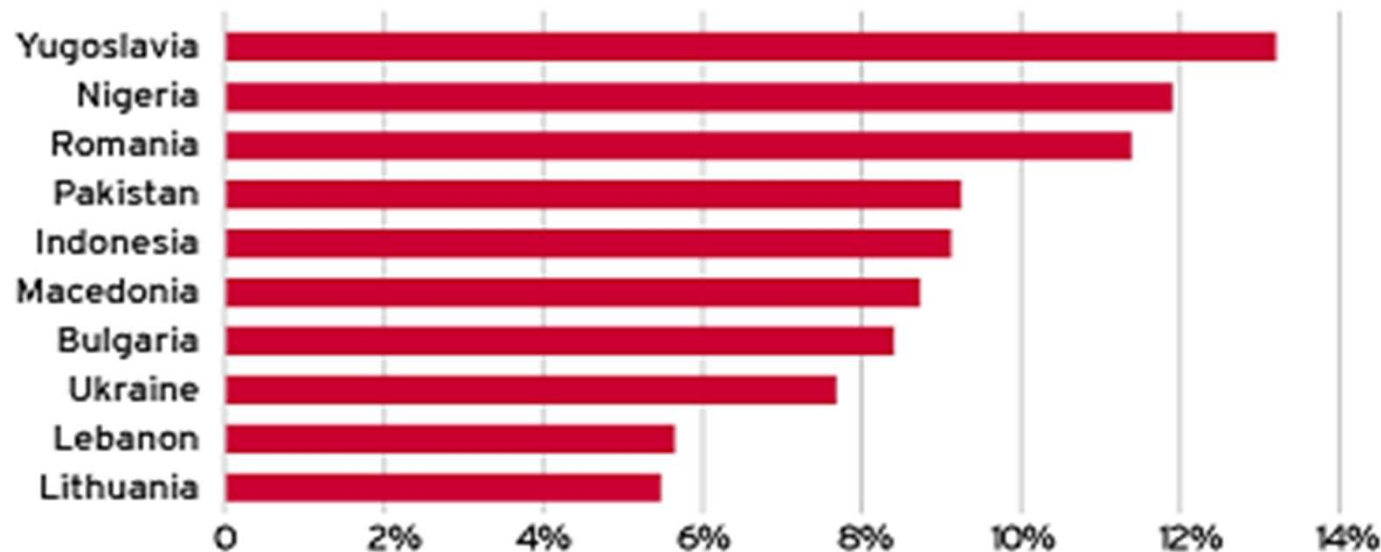
- Indonesia is **NOT A DIGITAL NATIVE** country, ICT illiteracy is still widely high!
- Lack of **CULTURE** in understanding the Cyberspace Eco-System
- Lack of **CYBER RISKS EXPERTISE**, if it is available, then it will be expensive

Indonesia Digital Challenges: Other Issues

Unfortunately with the high rapid growth of business retail transactions and online shopping via E.Commerce, was not followed by the business community's consciousness in understanding the current and future risks in Cyberspace. In several key surveys in the region have also showed that Indonesia is on the top of the lists of **"COUNTRY WITH THE HIGHEST RISKS OF CYBER ATTACKS"**.

High-risk countries

Percentage of orders by overseas buyers that U.S. sites later declared fraudulent



SOURCE: Merchant Risk Council

MSNBC

Indonesia Digital Challenges: High Risks Country

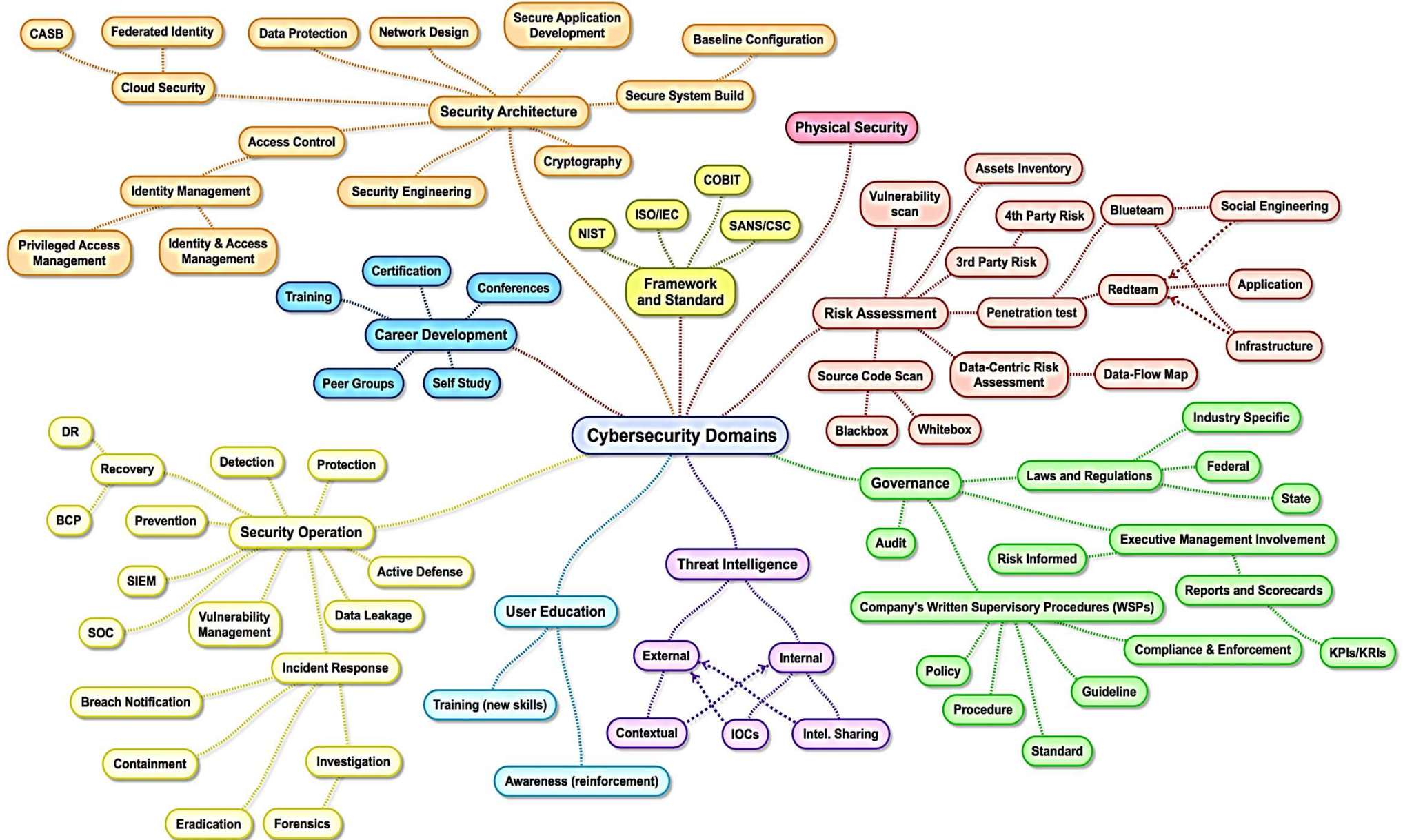


Indonesia dianggap sebagai
Negara paling **beresiko**
mengalami serangan IT
Security

*Threat exposure rate (TER): diukur dari persentase PC yang terkena serangan malware, baik berhasil, maupun gagal, dalam periode 3 bulan

Sumber: Security threat report 2013, SophosLabs

Cyber Security Mind Map



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Indonesia Digital Challenges: Overcoming The Risks

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THE MULTI-STAKEHOLDER APPROACH

- Indonesia is **NOT A DIGITAL NATIVE** country, ICT illiteracy is still widely high!
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Indonesia Digital Challenges: **DIGITAL NATIVE**

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DIGITAL NATIVE are the first generation to have grown up with new technology, having lived their entire lives surrounded by and using tools and toys of the digital age. E-mail, cellphones and instant messages are not only a part of their lives but are integral parts of their lives (Marc Prensky, 2001a).

4 Necessary Culture required to face the Cyberspace Risks:

- 1. Anticipative & Preventive Culture**
- 2. Security & Safety Culture**
- 3. Collaborative & Coordination Culture**
- 4. Mutual Respect & Ethics Culture**

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Indonesia Digital Challenges: Multistakeholder Engagement

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Most Internet security threats are increasingly complex, affecting multiple stakeholders at the same time, and requiring coordinated efforts to be detected and mitigated. When critical infrastructures are connected to the Internet, becoming exposed to the same vulnerabilities as other systems, and can be attacked by the same tools or techniques used for attacks in other contexts. The protection of critical infrastructures and government networks connected to the Internet have both Internet security and defense aspects - the protection of these infrastructures is done most of the time by government organizations. What is worrisome is that we are increasingly seeing purely Internet security issues being perceived by governments as purely defense issues. **The Internet ecosystem's security, stability and resilience should remain multi-stakeholder.** The cooperation among different sectors and stakeholders, already existing today, is **key to mitigate most of the current threats and to achieve more effective cybersecurity.**

Indonesia Digital Challenges: Engagement Strategies



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The Indonesia Cyber Security Forum or ICSF is a well established, non-profit and non-partisan professional organization headquartered in Jakarta, Indonesia whose mission in to PROVIDE Cyber Security and Cyber Resilience awareness, guidance, and security solutions through collaboration, education, volunteer, work, and training to assist the Indonesian Government, Military, Law Enforcement, Commercial Interests , and the International Partners.

And within ICSF, we build and nurture the space and freedom for knowledge transfer, collaborative planning, community development and best practice sharing.



A Multi-Stakeholder Approach to Cyber Security Awareness Jogjakarta, September 7th, 2017

Collective Responsibilities in Cyberspace



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Thank You!

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A Multi-Stakeholder Approach to Cyber Security Awareness **Jogjakarta, September 7th, 2017**