

# DEVELOPING CYBERSECURITY IN THE APAC REGION

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# CYBER INTELLIGENCE



DEFINITION OF Cyber intelligence: is the tracking, analyzing and countering of digital security threats. This type of intelligence is a blend of physical espionage and defense with modern information technology.

By WiseGEEK





**ECONOMIC  
INDICATOR**



**INTERNET  
STATISTICS**



**CYBER  
THREATS**



**INDONESIA  
STATISTICS**



# ECONOMIC INDICATOR

## PART 1

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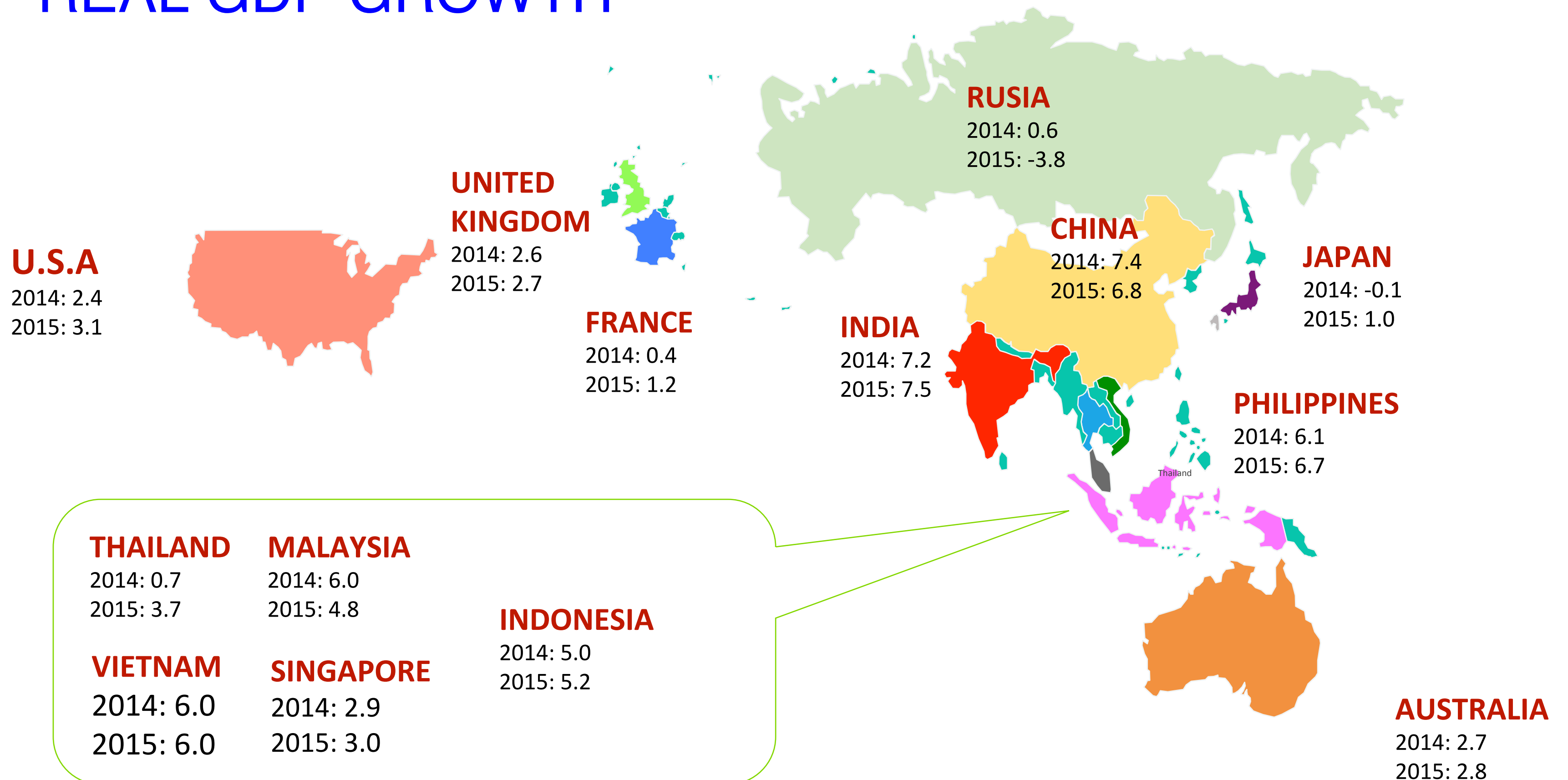


*"At the end of the day, what I cherish most are the human relationships. With the unfailing support of my wife and partner I have lived my life to the fullest. It is the friendships I made and the close family ties I nurtured that have provided me with that sense of satisfaction at a life well lived, and have made me what I am."*

— LEE KUAN YEW, a speech, Singapore in 2003.



# REAL GDP GROWTH





# Demographic - by selected countries

Looking at Population and Its GDP Per Capita

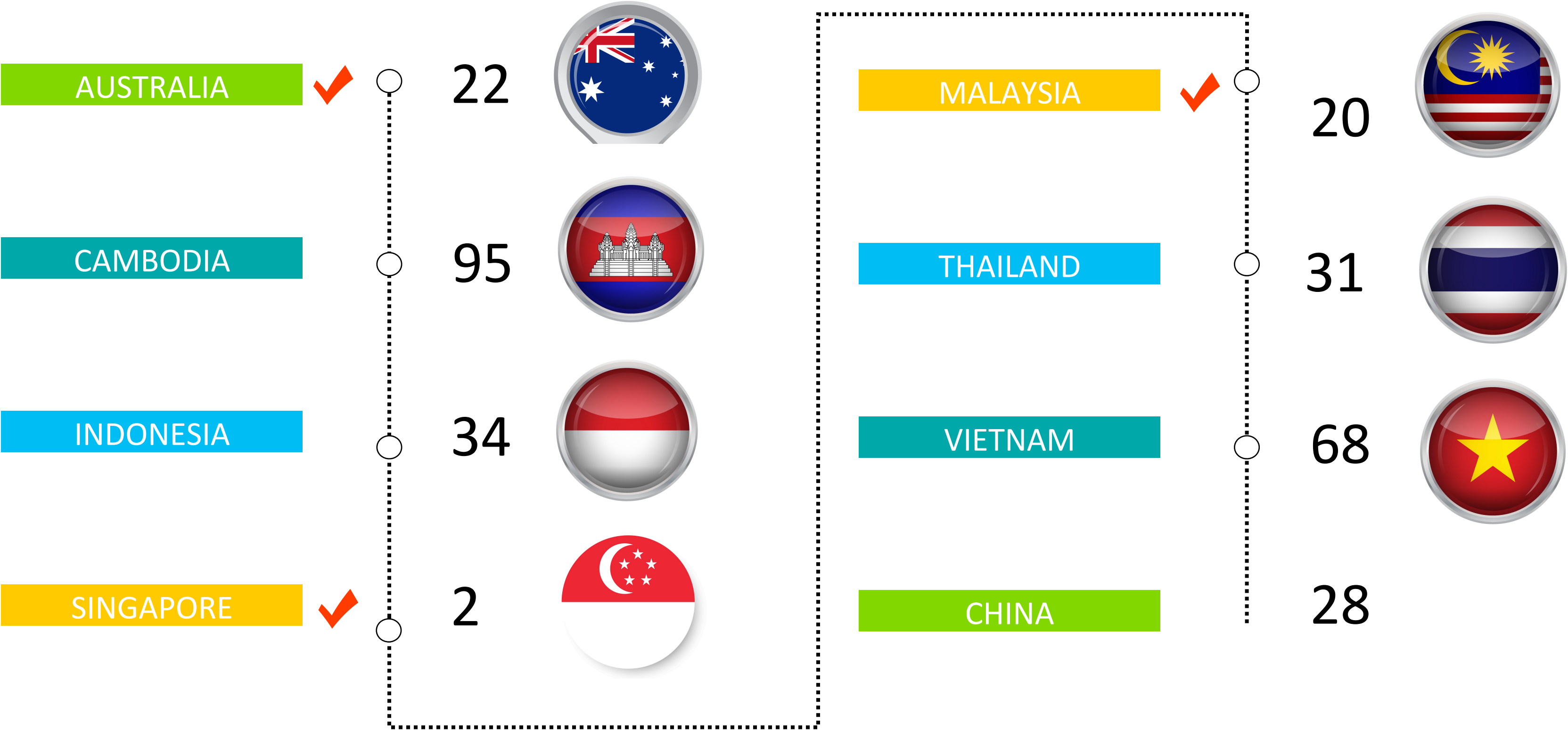
Countries	Population in millions	GDP Per Capita In US\$
<b>Australia</b>	<b>23.2</b>	<b>64,893</b>
Cambodia	15.4	1,016
<b>Indonesia</b>	<b>248.1</b>	<b>3,510</b>
Singapore	5.4	54,776
<b>Malaysia</b>	<b>29.6</b>	<b>10,548</b>
Thailand	68.2	5,674
<b>Vietnam</b>	<b>89.7</b>	<b>1,902</b>
China	1,360.8	6,747



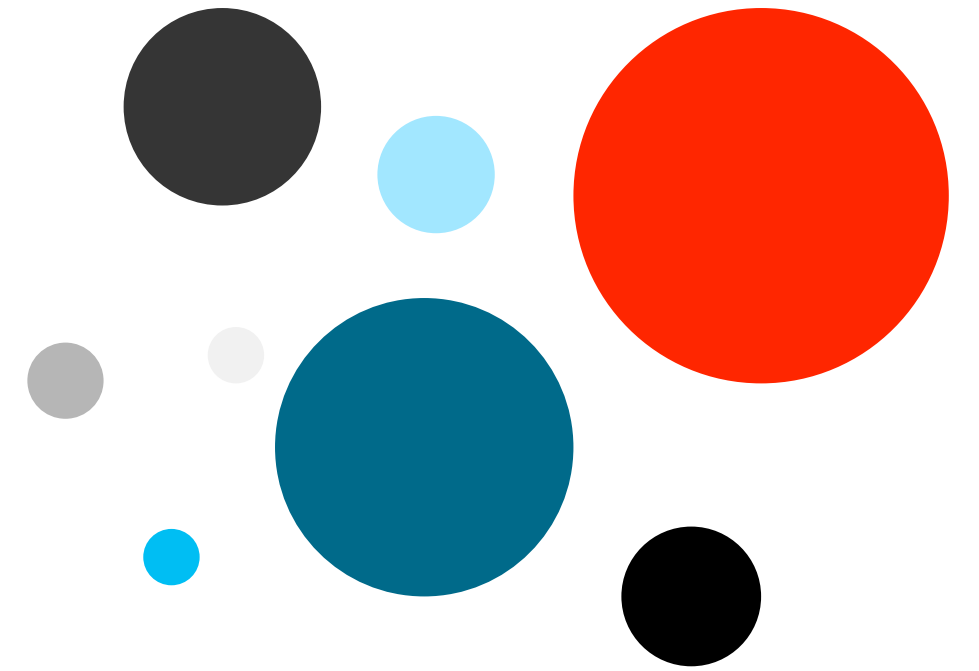


# GLOBAL Competitiveness REPORT

“The **Global Competitiveness Report** (GCR) is a yearly **report** published by the World Economic Forum. Since 2004, the **Global Competitiveness Report** ranks countries based on the **Global Competitiveness Index**, developed by Xavier Sala-i-Martin and Elsa V. Artadi”. - Wikipedia







## SUPPLY & CONSUMPTION DIRECTIONS

Examine each country's characteristics:

GDP Growth

Natural Resources

Manufacturing Capabilites





# ASIA PACIFIC

trade center



**1st**

ATTRACTIVE – World Manufacturer



**2nd**

MARKET – Goods Consumption



**3rd**

SKILLED WORKER – pools of labours



# INTERNET STATISTICS



## PART 2

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“I am disturbed by how states abuse laws on Internet access. I am concerned that surveillance programmes are becoming too aggressive. I understand that national security and criminal activity may justify some exceptional and narrowly-tailored use of surveillance. But that is all the more reason to safeguard human rights and fundamental freedoms”.

[By Ban Ki-moon](#)



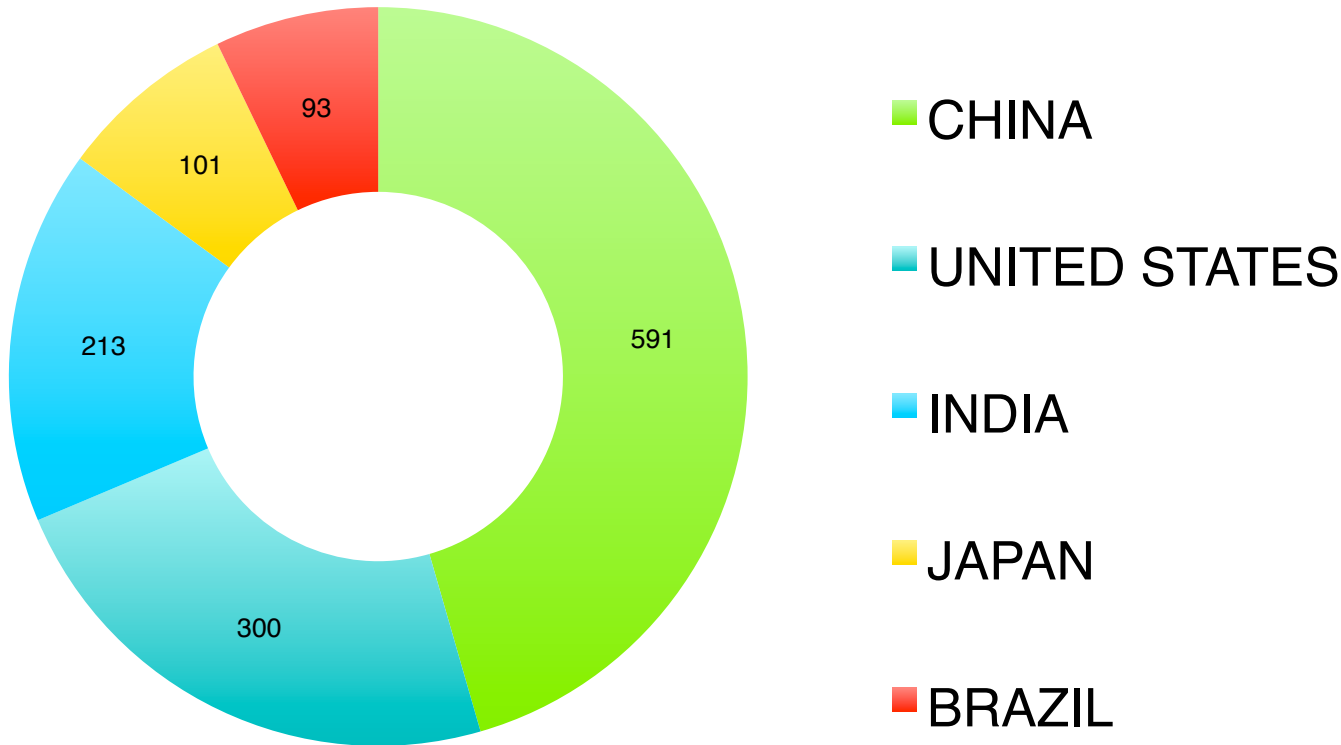
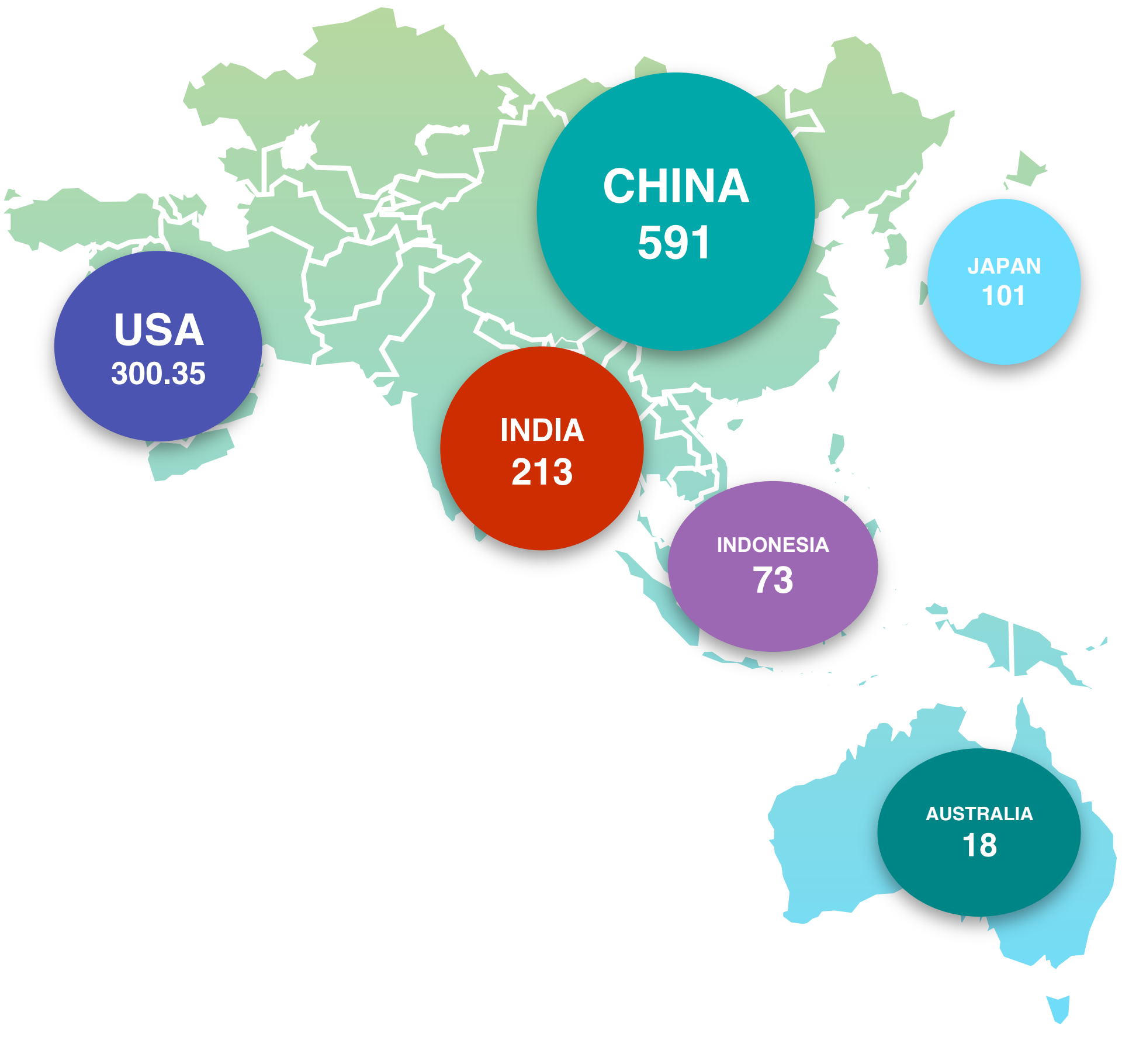
# NUMBER OF INTERNET USERS

in **selected** countries (in millions) in 2014

## A CLOSER LOOK

2.8  
billion

In 2014, the total number of internet users in the world reached 2.8 billion. The top 20 countries with highest internet users dominated 75% of the total world users. The top 5 countries were China, United States, India, Japan and Brazil. The rest of the 25% was contributed by the other 178 countries.

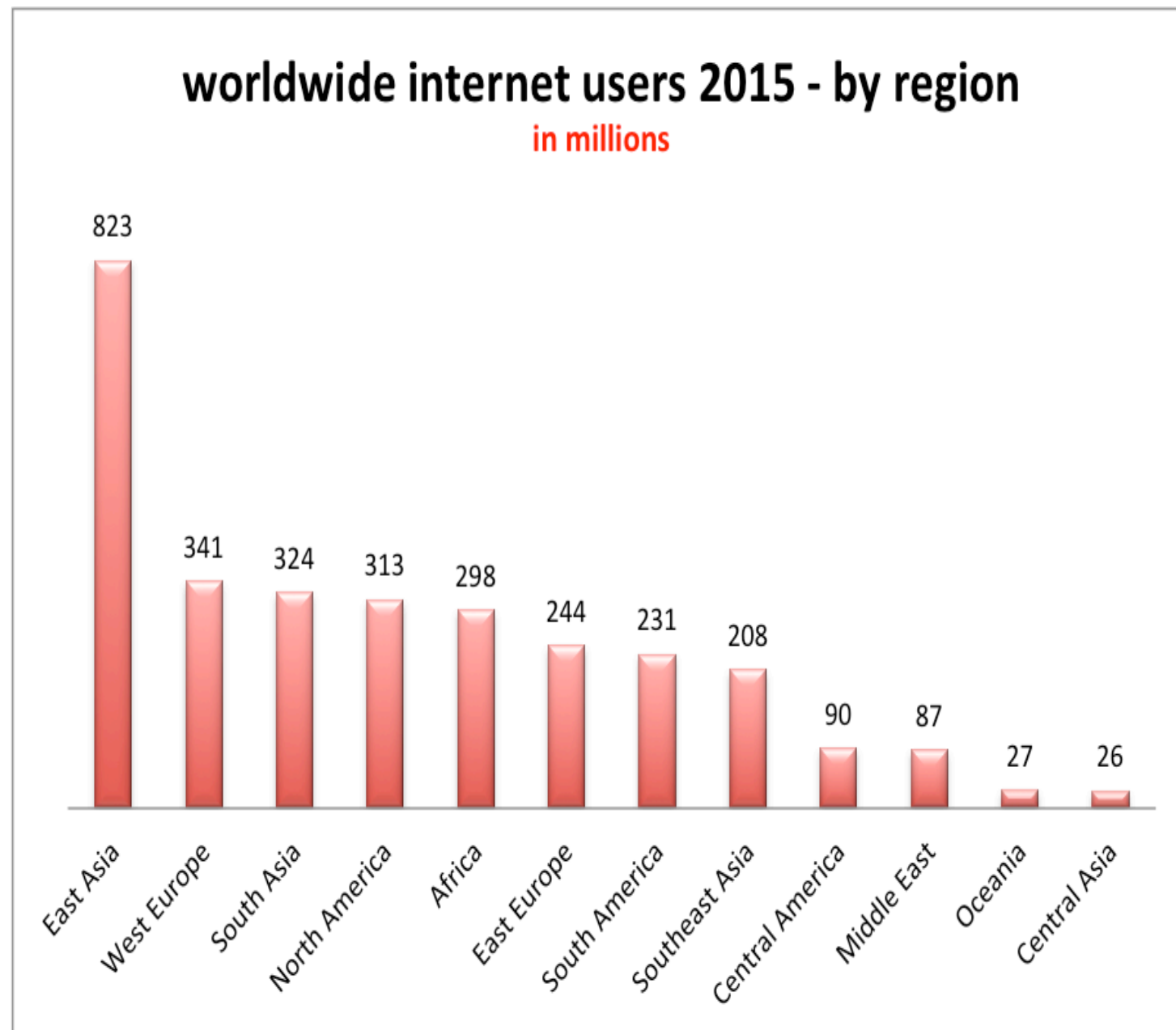




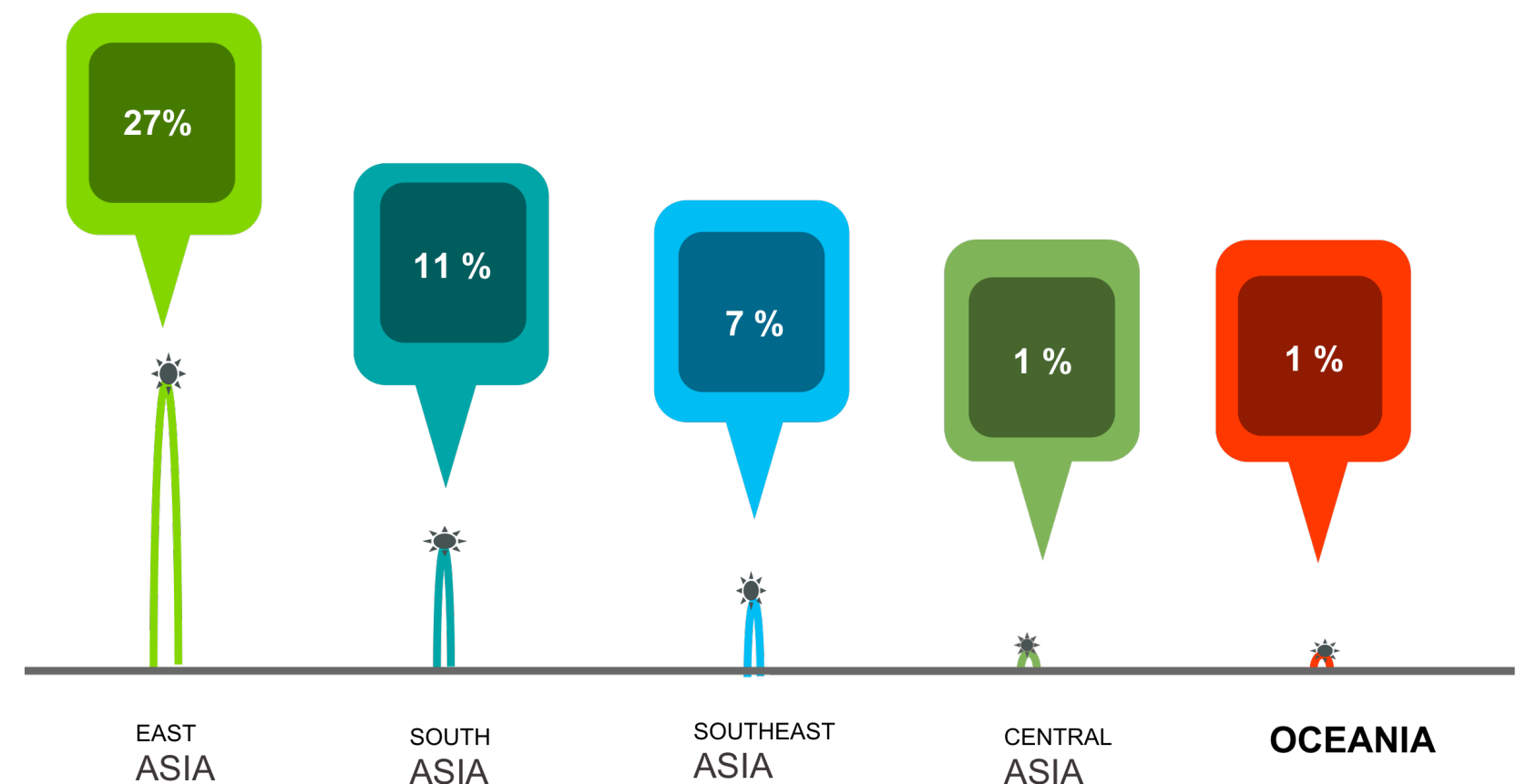
# WORLD CONCENTRATION

ASIA PACIFIC almost covers the internet activities

As the Internet plays a significant role in people's life, we are aware that the ASIA PACIFIC region becomes a MAJOR driver towards the internet usage.



E-commerce = Trade = Economic Growth



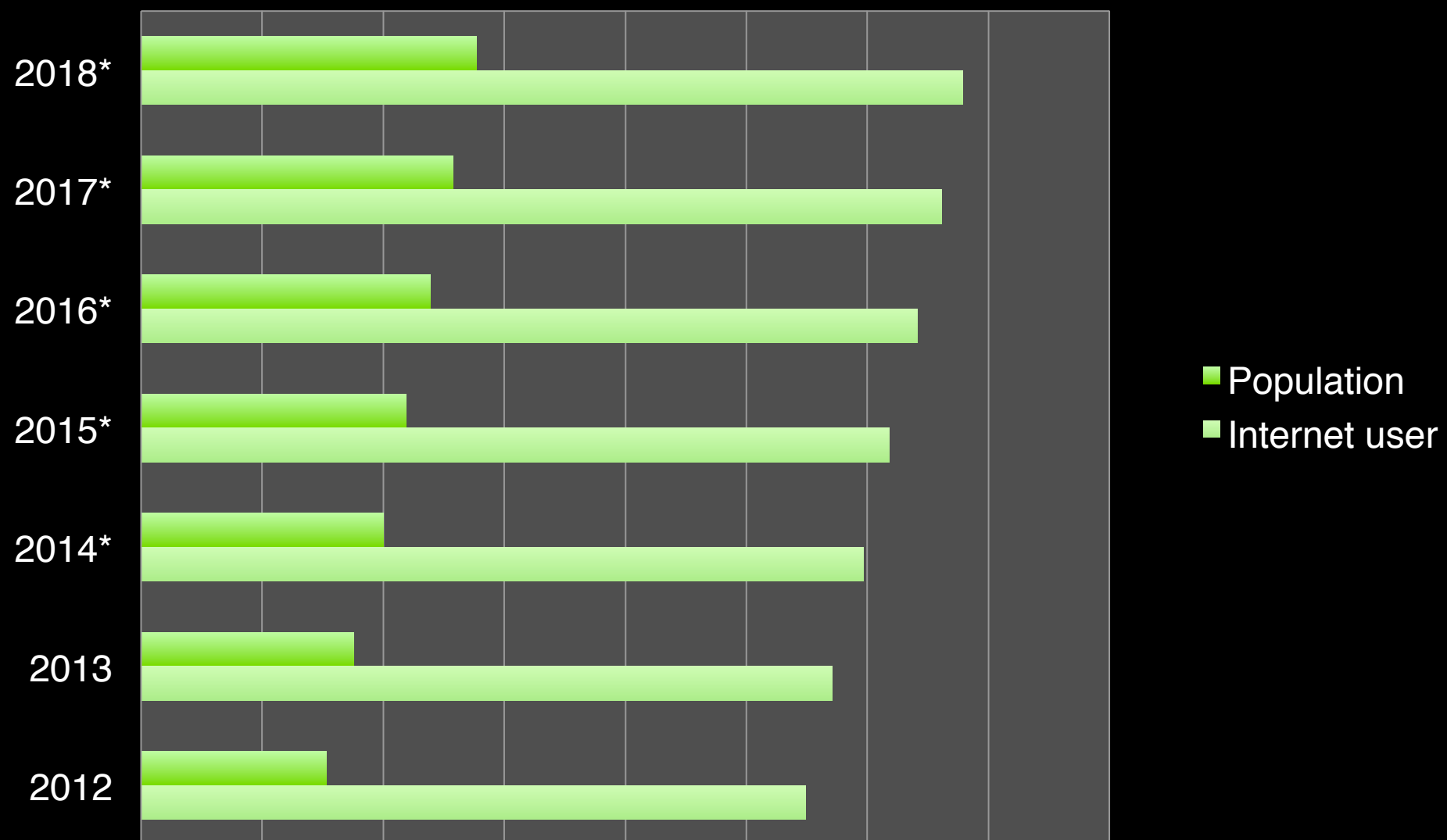


# ASPAC social network penetration

2012 - 2018

ASPAC social network penetration 2012-2018

0.0% 10.0% 20.0% 30.0% 40.0% 50.0% 60.0% 70.0% 80.0%



Source: eMarketer, American Marketin Association (STATISTA)



## TOP ORIGINATING COUNTRY – CYBER ATTACK IN 2013

COUNTRY	Q1	Q2	Q3	Q4
Indonesia	21	38	20	5.7
China	34	33	35	43
United States	8.3	6.9	11	19
Taiwan	2.5	2.5	5.2	3.4
Turkey	4.5	2.4	-	-
India	2.6	2.0	1.9	-
Russia	2.7	1.7	2.6	1.5
Brazil	2.2	1.4	2.1	1.1
Rumania	2.0	1.0	1.7	0.9
South Korea	1.4	0.9	1.2	0.0
Canada	-	-	-	10
Netherland	-	-	-	2.7
Germany	-	-	-	0.8
Venezuela	-	-	-	-
Others	18	11	17	12



# Share of global internet users who are concerned about foreign government agencies secretly monitoring their online activities as of November 2014, by region

Source: [www.statista.com](http://www.statista.com) 2015 report

## TOTAL INTERNET USERS

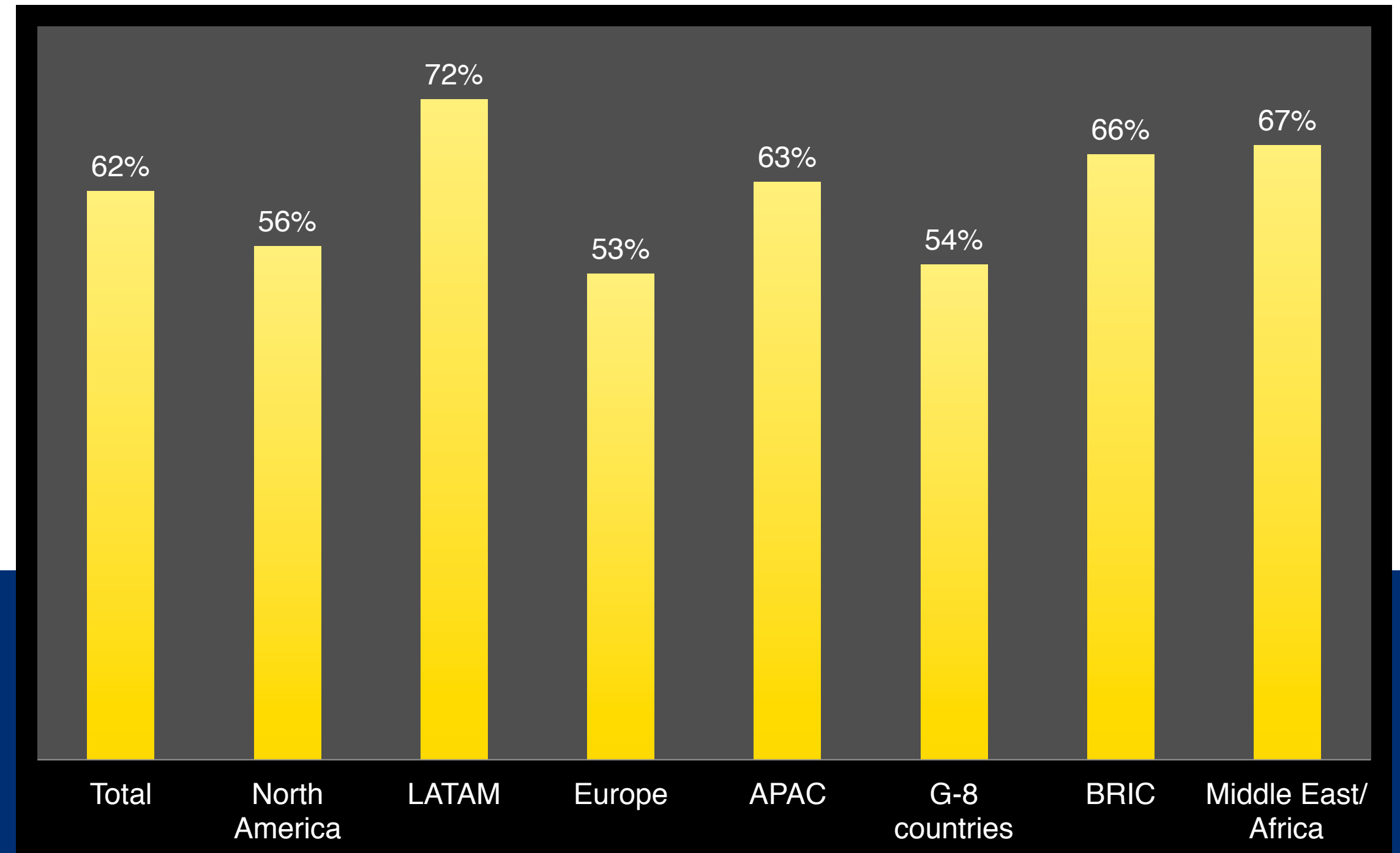
Out of the total respondents done by CIGI (Statista Report) , there was a 62% of people were concerned about foreign agencies spying online.

62%

## ASIA PACIFIC

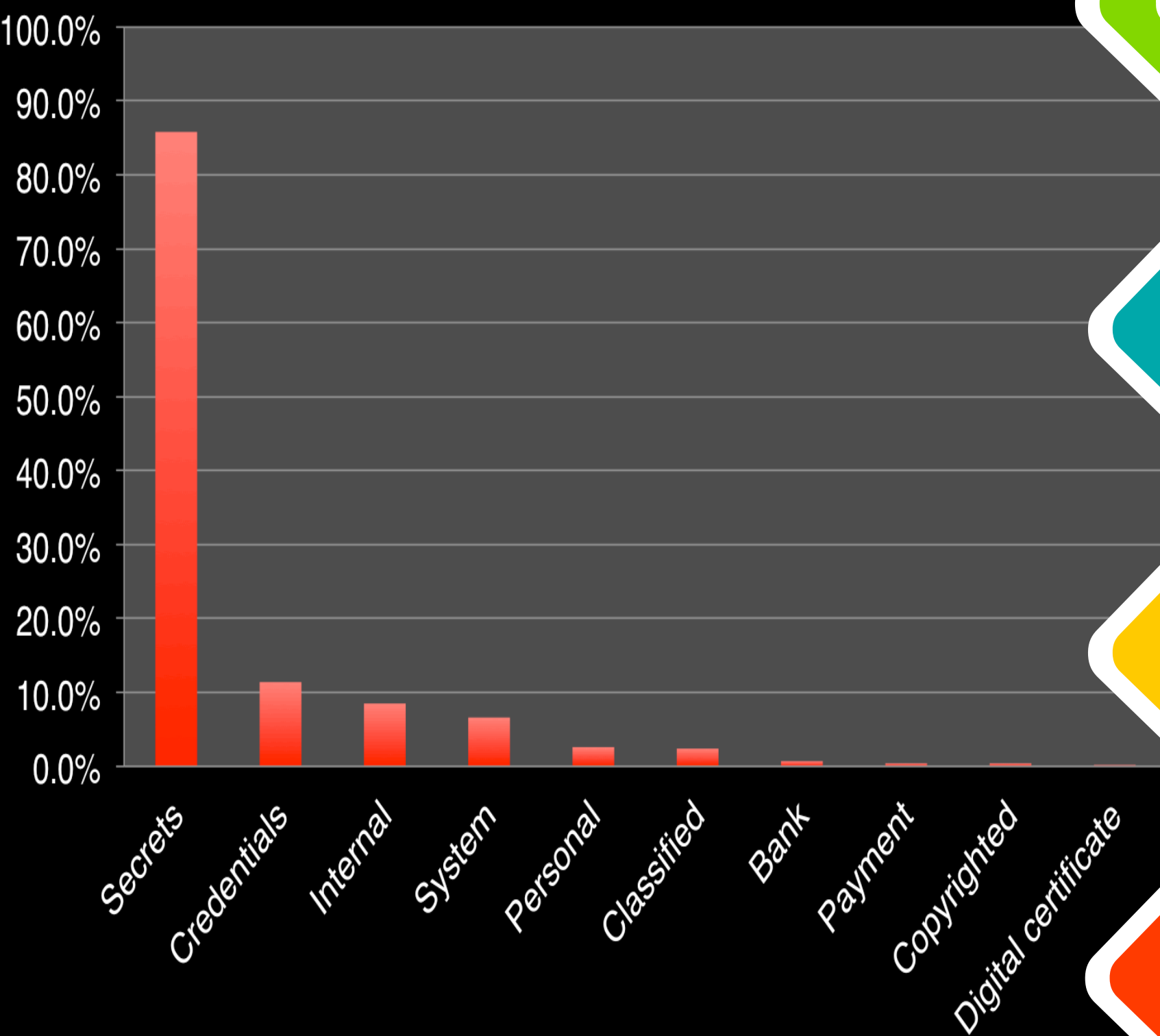
Even internet users in this region showed a higher sentiment toward spying activities

63%





# VARIETIES OF DATA COMPROMISED WITHIN CYBER ESPIONAGE INCIDENTS WORLDWIDE IN 2014



85  
%

SECRETS

11.4  
%

CREDENTIALS

8.5  
%

INTERNAL

6.6  
%

SYSTEM



# INDONESIA STATISTICS

## PART 4

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“The Internet is becoming the town square for the global village of tomorrow”.

[Bill Gates](#)

# INTERNET ACCESS IN INDONESIA

The numbers of internet users in Indonesia is relatively small. In the year 2014, only 34% of the population who had access to the internet

## LOW INTERNET PENETRATION

The main reason for this is due to the infrastructure availability in most of the rural areas.



	2010	2011	2012	2013	2014
Population in MILLIONS	238.5	242	245.5	248.9	252.4
Internet Users in MILLIONS	42	55	63	71.2	88.1
Percentage of Internet Users	17.6	22.7	25.7	28.6	34.9



# AGE OF INTERNET USERS in Indonesia

**49%** *between*

*18 yrs – 25 yrs old*



**33.8%** *between*

*26 yrs – 35 yrs old*



**14.6%** *between*

*36 yrs – 45 yrs old*



**2.4%** *between*

*46 yrs – 55 yrs old*



**0.2%** *between*

*56 yrs – 65 yrs old*



## Internet Users Education Profile



0.4%

NO  
EDUCATION



1.2%

ELEMENTARY



74.3%

JUNIOR &  
HIGH SCHOOL



23.7%

DIPLOMA &  
UNDERGRADUATE



0.4%

GRADUATE  
SCHOOL



# DOMINATING FACTORS

## 3 INTERNET USAGE DRIVERS



SMARTphone



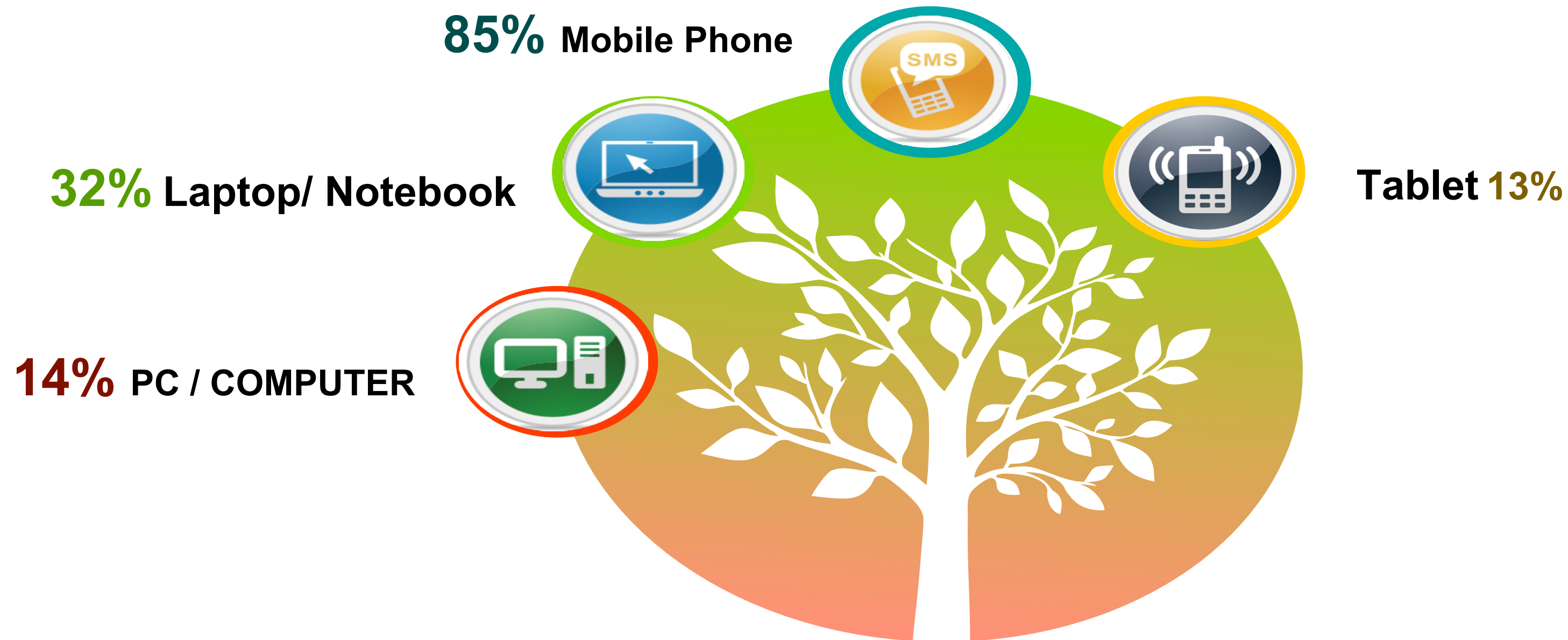
SOCIALmedia



INFRASTRUCTURE

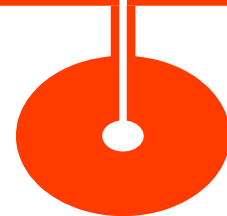
# DEVICES TO THE INTERNET

Percentage of Each DEVICE OWNERS to connect to the internet – Answers could be more than 1 device used





# Internet Users ACTIVITIES



27%

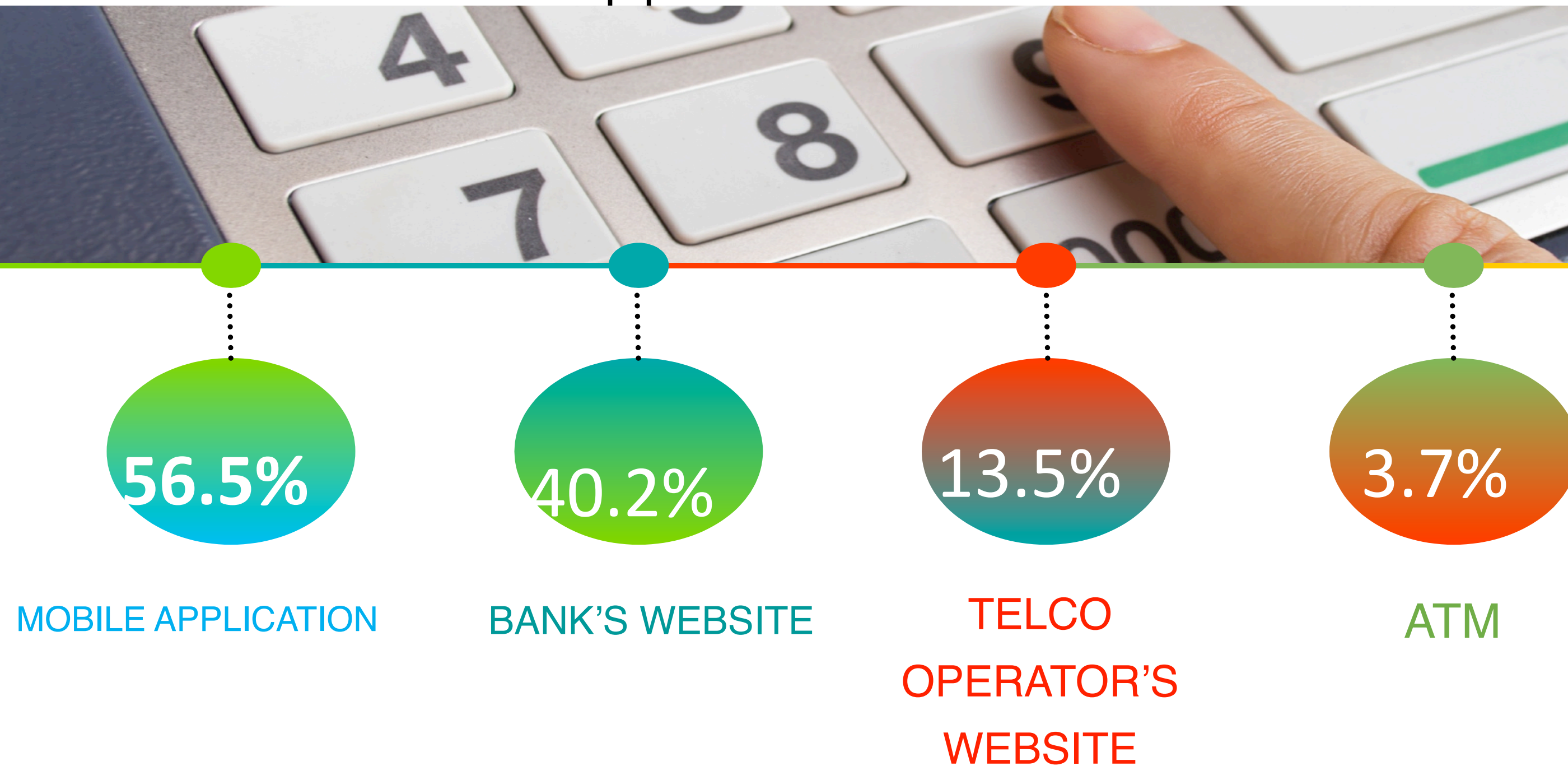
**ONLINE SHOPPING**



34%

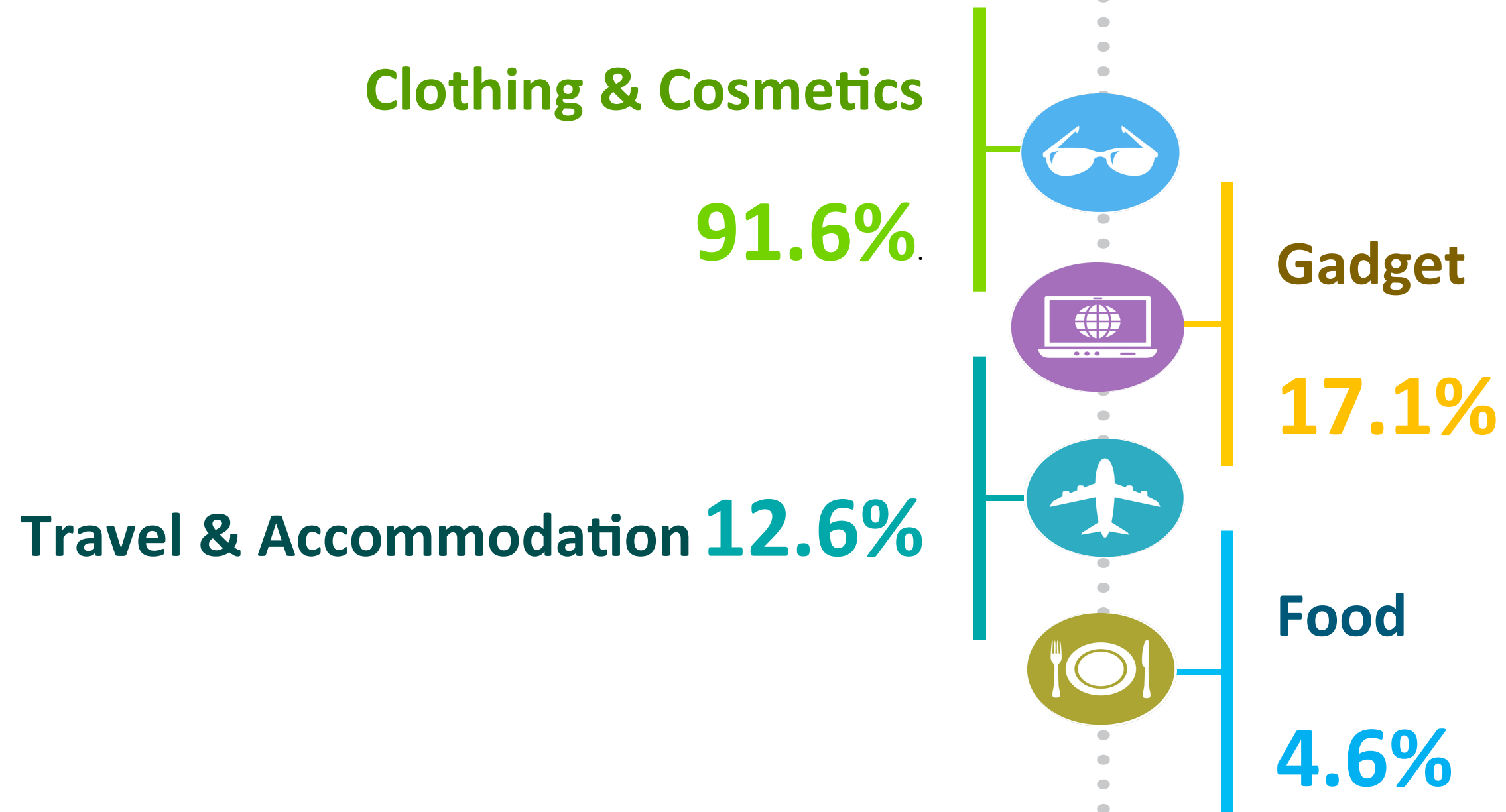
**SEARCHING FOR  
INFORMATION**

# INTERNET BANKING application choice





# PEOPLE'S CHOICES OF ONLINE SHOPPING





What Do The  
Numbers Tell  
Us?

Are we vulnerable towards  
Cyber Attack?





# ASEAN ECONOMIC COMMUNITY BLUEPRINT

ASEAN VISION 2020

## SINGLE Market & Production Base

- FREE FLOW OF GOODS
- FREE FLOW OF SERVICES
- FREE FLOW OF INVESTMENT
- FREE FLOW OF CAPITAL
- FREE FLOW OF SKILLED LABOUR

## COMPETITIVE Economic Region

- Competition Policy
- Consumer Protection
- Intellectual Property Rights
- Infrastructure Dev.
- Taxation
- E-Commerce

## EQUITABLE Economic Dev.

- SME DEVELOPMENT
- INITIATIVE FOR ASEAN INTEGRATION

**INTEGRATION INTO THE GLOBAL ECONOMY**

IN 2013 PRESIDENT SBY INITIATED THE FORMATION OF NATIONAL CYBERSECURITY AGENCY



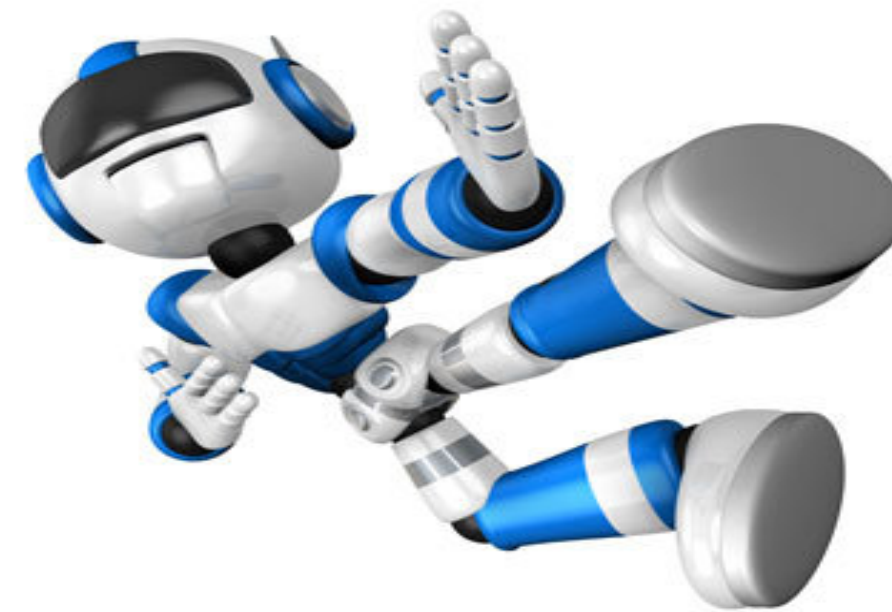


preparation for cyber command center

## MAIN OBJECTIVES & FUNCTIONS



1. INFORMATION INTELLIGENCE



2. CYBER ACTION

3. STRENGTHENING FACTORS

# GOVT Initiatives



PRESIDENT'S INITIATIVE  
Followed by Ministry of Defence  
Initiative



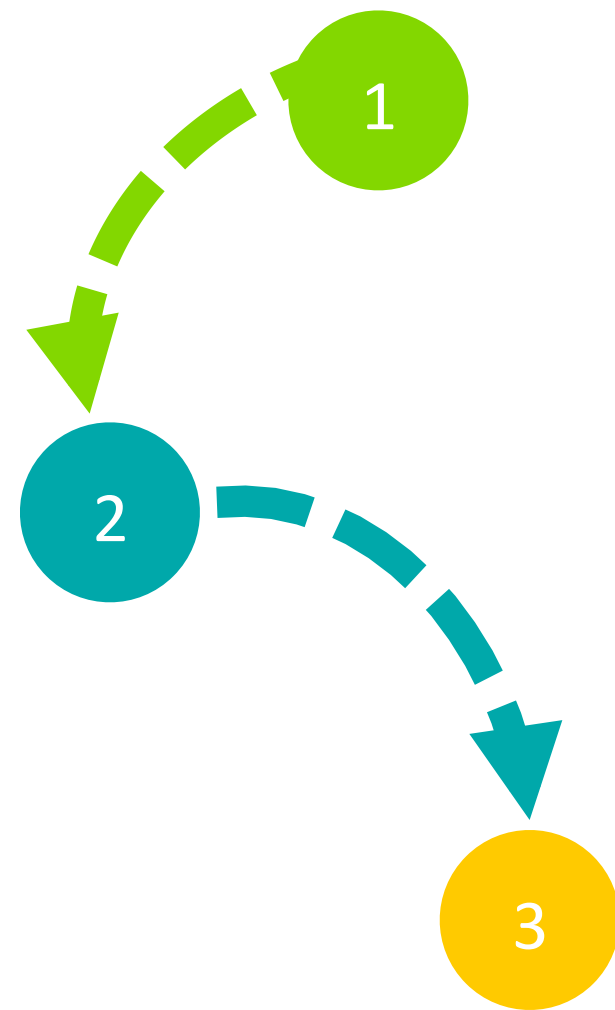
National Cyber Agency  
Coordinating Minister of Politics,  
Law and Security



Target: Completion of Cyber  
Command Center



# RECOMMENDED STRATEGIES



**01**

## FORMULATE A JOINT POLICY

Governments in Asia Pacific need to formulate a joint policy to combat threats that are becoming more AND more sophisticated

**02**

## CONTINUOUS MONITORING

There has to be a program that will provide continuous monitoring, detection and the quick containment of malware and other perceived threats to each country.

**03**

## DETECT & BLOCK

Establish a joint development program to detect and block advanced malware which are spreading through the region

## CREATING A SAFE REGION



INFORMATION  
INTELLIGENCE

DOLOR AMET



**THANK YOU**



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