BUSINESS CONTINUITY MANAGEMENT

64th RBAP National Convention & General Membership Meeting

29 – 30 May 2017

BANGKO SENTRAL NG PILIPINAS

PRESENTATION OUTLINE

- 2015 Disasters in Numbers
- 2016 & 2017 Top Business Risks
- What is BCM?
- Supervisory Objectives
- BCM Process
- Other Salient Features
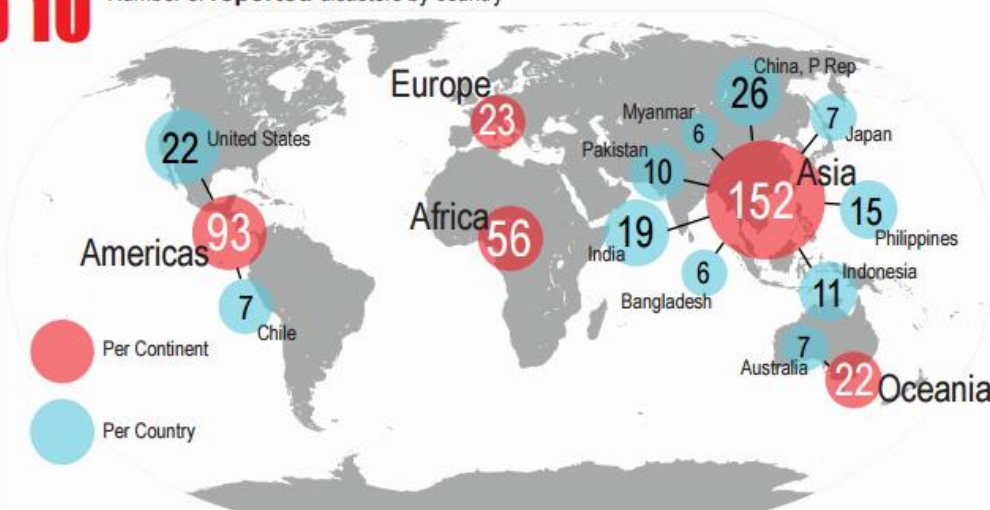- BCM – The Time is Now

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2015 NATURAL DISASTERS IN NUMBERS

Total of **economic damage** reported by country (in billion US$)

Country	Value
United States	24,88
China, P Rep	13,66
Nepal	5,17
United Kingdom	3,60
India	3,30
Chile	3,10
Australia	2,40
South Africa	2,00
Philippines	1,90
France	1,00

Top 10 — Number of **reported** disasters by country

- Europe 23
- United States 22
- Americas 93
- Chile 7
- Africa 56
- India 19
- China, P Rep 26
- Myanmar 6
- Pakistan 10
- Japan 7
- Asia 152
- Philippines 15
- Bangladesh 6
- Indonesia 11
- Australia 7
- Oceania 22

● Per Continent
● Per Country

(1): Natural disasters: Epidemic and insect infestations not included

2016 TOP BUSINESS RISKS

Top 10 Global Business Risks for 2016

Business interruption (incl. supply chain disruption)
38% ◆ 2015: 1 (46%)

Market developments (volatility, intensified competition, market stagnation)

Cyber incidents (cyber crime, data breaches, IT failures)
28% ▲ 2015: 5 (17%)

Changes in legislation and regulation (economic sanctions, protectionism)
24% ▼ 2015: 4 (18%)

Macroeconomic developments (austerity programs, commodity price increase, inflation/deflation)
22% ▲ NEW

Loss of reputation or brand value

24% ▼ 2015: 2 (30%)

11% ◆ 2015: 9 (11%)

Theft, fraud and corruption
11% ◆ 2015: 10 (9%)

To see full Risk Barometer 2016 Rankings click here ⊙

For methodology, see page 3. Source: Allianz Global Corporate & Specialty

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Allianz Risk Pulse

Allianz Risk Barometer
Top Business Risks 2016

Executive Summary

The fifth annual Allianz Risk Barometer identifies the top corporate perils for 2016 and beyond, based on the responses of more than 800 risk experts from 40+ countries around the globe.

Business interruption (incl. supply chain disruption), market developments (volatility, intensified competition and market stagnation) and cyber incidents are the top three global business risks. Business interruption (BI) is top for the fourth year in succession.
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The risk landscape is changing. Businesses face a wider range of disruptive forces in 2016 and beyond. The effects of globalization, digitalization and technological disruption pose fundamental challenges to many business models.
⊙ page 4

Businesses and insurers must review their insurance and risk mitigation needs to reflect this new risk management reality. Refining existing, and developing new, risk services will be necessary.
⊙ page 4

Interconnectivity of risk continues to grow. Many of the top 10 risks such as natural catastrophes, fire, explosion, cyber incidents and political risks can have severe BI implications. Businesses are increasingly concerned about the impact political instability can have on supply chains.
⊙ page 5

Market developments is the second top risk. Many industrial sectors are facing tougher operating conditions, including intensified competition from new areas.
⊙ page 7

Businesses are more concerned about cyber incidents, which is the top long-term risk and the peril most likely to increase the threat of BI. Hackers are not the only problem. Operational technology issues also result in major system interruptions.
⊙ page 10

Digital and technological innovations and transformations, such as Industry 4.0, bring new risks in addition to benefits. Increasing sophistication of cyber-attacks is the impact of increasing digitalization businesses fear most. Many companies have insufficient knowledge and budget to mitigate this risk, as the threat continues to evolve.
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There are significant differences in the top 10 risks around the world. Macroeconomic developments tops the Africa & Middle East rankings. Cyber incidents is the number one risk in the UK.
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Allianz ⑪

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2017 TOP BUSINESS RISKS

Allianz Risk Pulse

Allianz Risk Barometer
2017 Appendix

Top Business Risks 2017

The sixth annual Allianz Risk Barometer was conducted among Allianz clients (global businesses) and brokers. It also surveyed risk consultants, underwriters, senior managers and claims experts in the corporate insurance segment of both Allianz Global Corporate & Specialty (AGCS) and local Allianz entities.

Figures represent the number of responses as a percentage of all survey responses (4,679). More than one risk could be selected by the 1,237 respondents.

			2016 Rank	Trend
1	Business interruption (incl. supply chain disruption and vulnerability)	37%	1 (38%)	-
2	Market developments (volatility, intensified competition/new entrants, M&A, market stagnation, market fluctuation)	31%	2 (34%)	-
3	Cyber incidents (cyber crime, IT failure, data breaches, etc.)	30%	3 (28%)	-
4	Natural catastrophes (e.g. storm, flood, earthquake)	24%	4 (24%)	-
5	Changes in legislation and regulation (government change, economic sanctions, protectionism, etc.)	24%	5 (24%)	-

13	Quality deficiencies, serial defects, product recall	8%	14 (7%)	▲
14	Climate change/increasing volatility of weather	6%	16 (4%)	▲
15	Talent shortage	6%	13 (8%)	▼
16	Brexit, Euro-zone disintegration	5%	18 (2%)	▲
17	Environmental risks (e.g. pollution)	5%	15 (5%)	▼
18	Power blackouts	2%	17 (3%)	▼
19	Health issues (e.g. pandemics)	1%	19 (1%)	-
20	Machinery breakdown	1%	20 (1%)	-

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BUSINESS CONTINUITY MANAGEMENT

Encompasses policies, standards, facilities, personnel and practices

Covers all sorts of disruptions

Prioritizes critical operations and subsequent efforts to return them to normal

Tailored to the nature, scale, and complexity of a BSFI's business

SUPERVISORY OBJECTIVES

Ensure Safety and Soundness/ Resilience
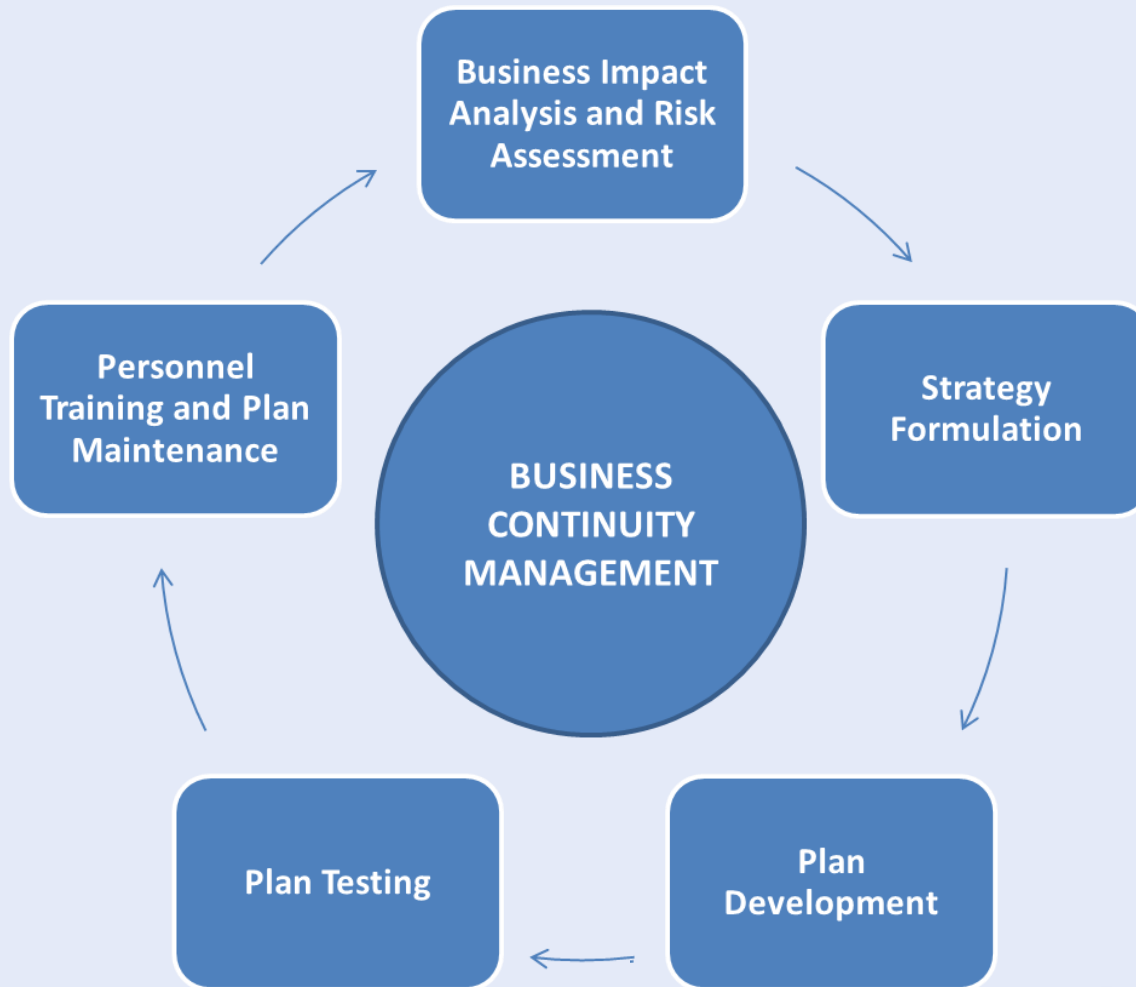
Sustain Delivery of Financial Services

Preserve Public Trust and Confidence

Mitigate Systemic Risk

BCM PROCESS

Business Continuity Management process cycle: Business Impact Analysis and Risk Assessment → Strategy Formulation → Plan Development → Plan Testing → Personnel Training and Plan Maintenance

BCM - THE TIME IS NOW

BUSINESS
CONTINUITY
MANAGEMENT
THE TIME IS NOW

bci Business Continuity Institute

Emerging Threats and Risks

Malware
Ransomware

Advanced Persistent Threats
DDoS Attacks

ATM Malware/ATM Host Spoofing
CNP Fraud

Phishing
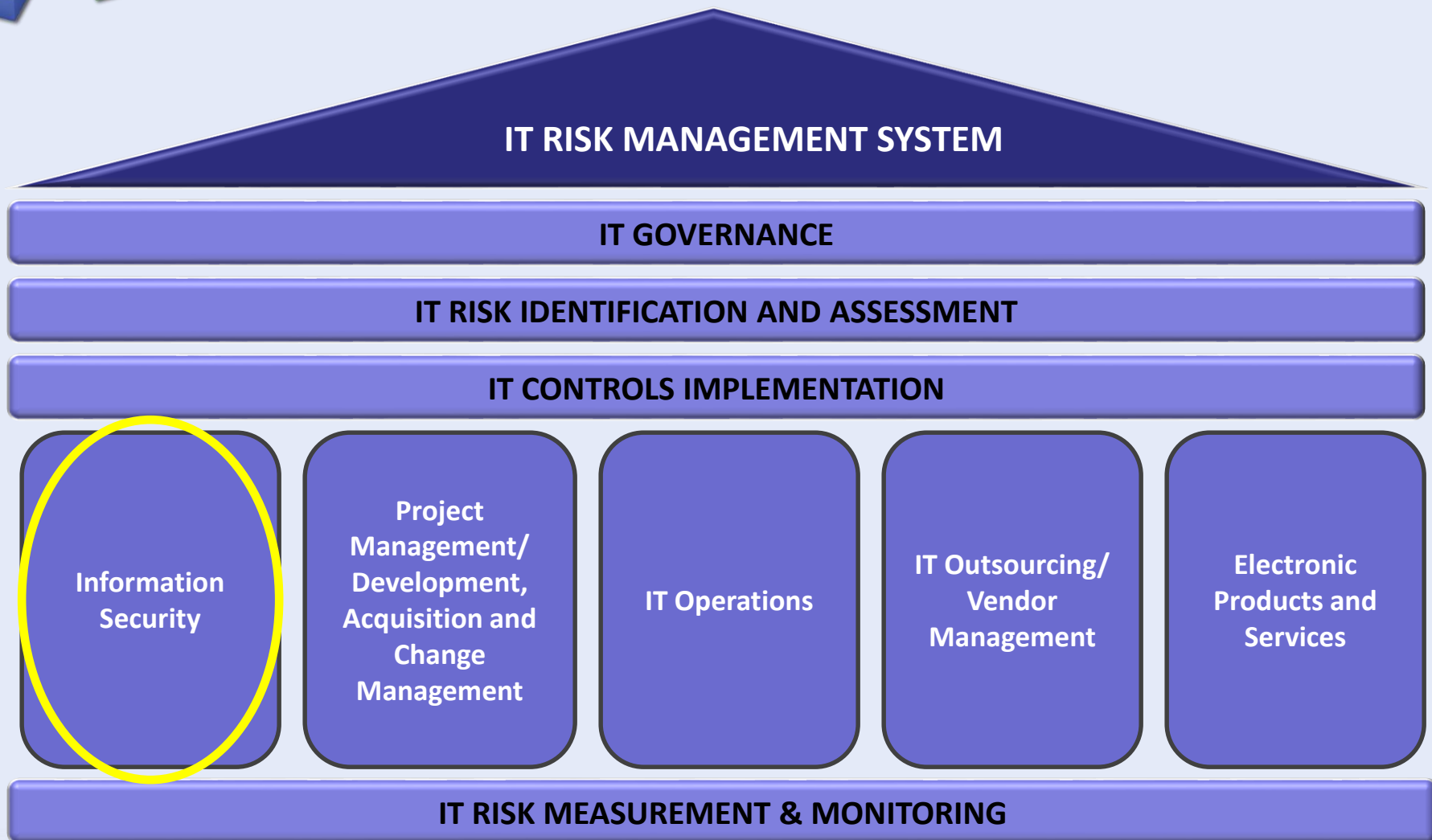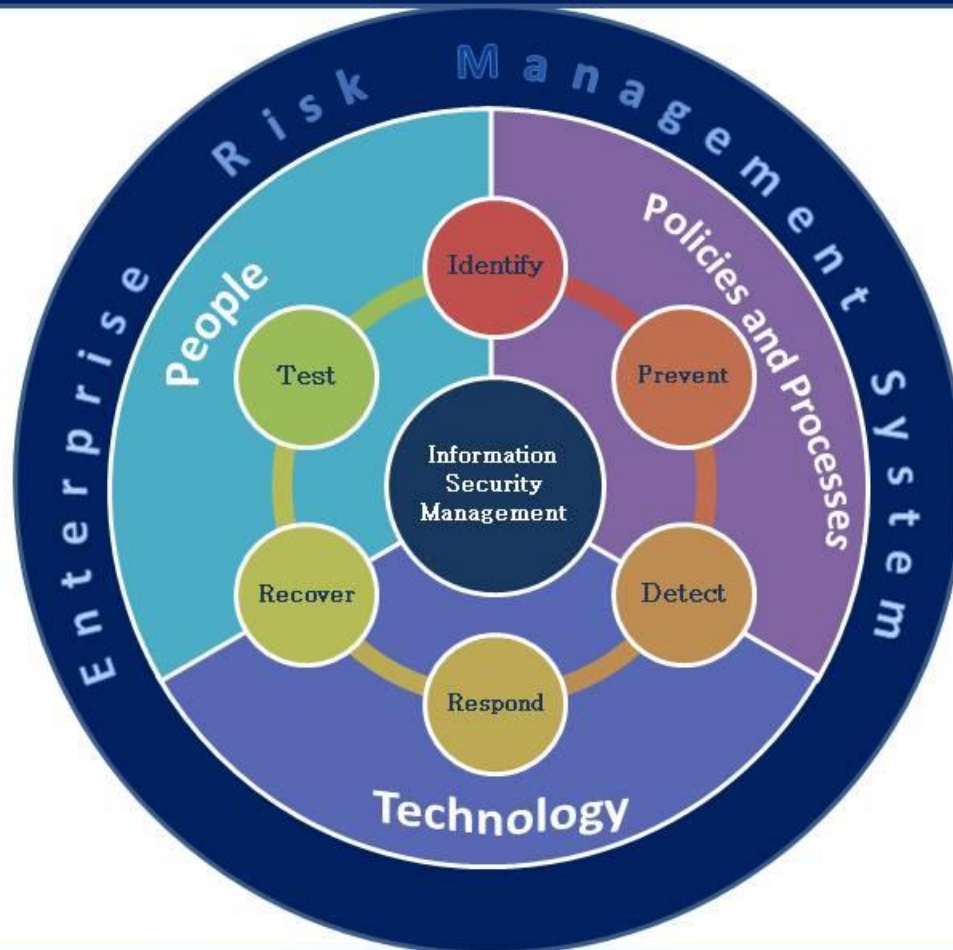Spearphishing

IT RISK MANAGEMENT FRAMEWORK

IT RISK MANAGEMENT SYSTEM

IT GOVERNANCE

IT RISK IDENTIFICATION AND ASSESSMENT

IT CONTROLS IMPLEMENTATION

| Information Security | Project Management/ Development, Acquisition and Change Management | IT Operations | IT Outsourcing/ Vendor Management | Electronic Products and Services |

IT RISK MEASUREMENT & MONITORING

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INFORMATION SECURITY RISK MANAGEMENT

OBJECTIVES OF ISRM

➢ Address technological developments and innovation and dynamic risk profiles

➢ Respond to growing concerns on cyber-attacks and cyber-threats

➢ Introduce a renewed focus on information security both recovery and resumption

➢ Present a holistic framework on ISRM

➢ Heighten expectations of the role of the Board and Senior Management on ISRM

➢ Add provisions on information sharing, collaboration and situational awareness

PROPORTIONATE ADOPTION OF ISRM

| Simple | Moderately Complex | Highly Complex |

- IT Infrastructure and Operations
- Digital/Electronic Financial Products and Services
- IT Projects and Initiatives
- Outsourced Services
- Systemic Importance
- Threats

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REQUIREMENTS FOR RURAL BANKS

- IS Governance Including Security Culture

- Security Policies and Procedures

- Identity and Access Management

- Safe Computing Practices

- Hiring Practices

- Security Training and Awareness Programs

- Physical and Environmental Controls
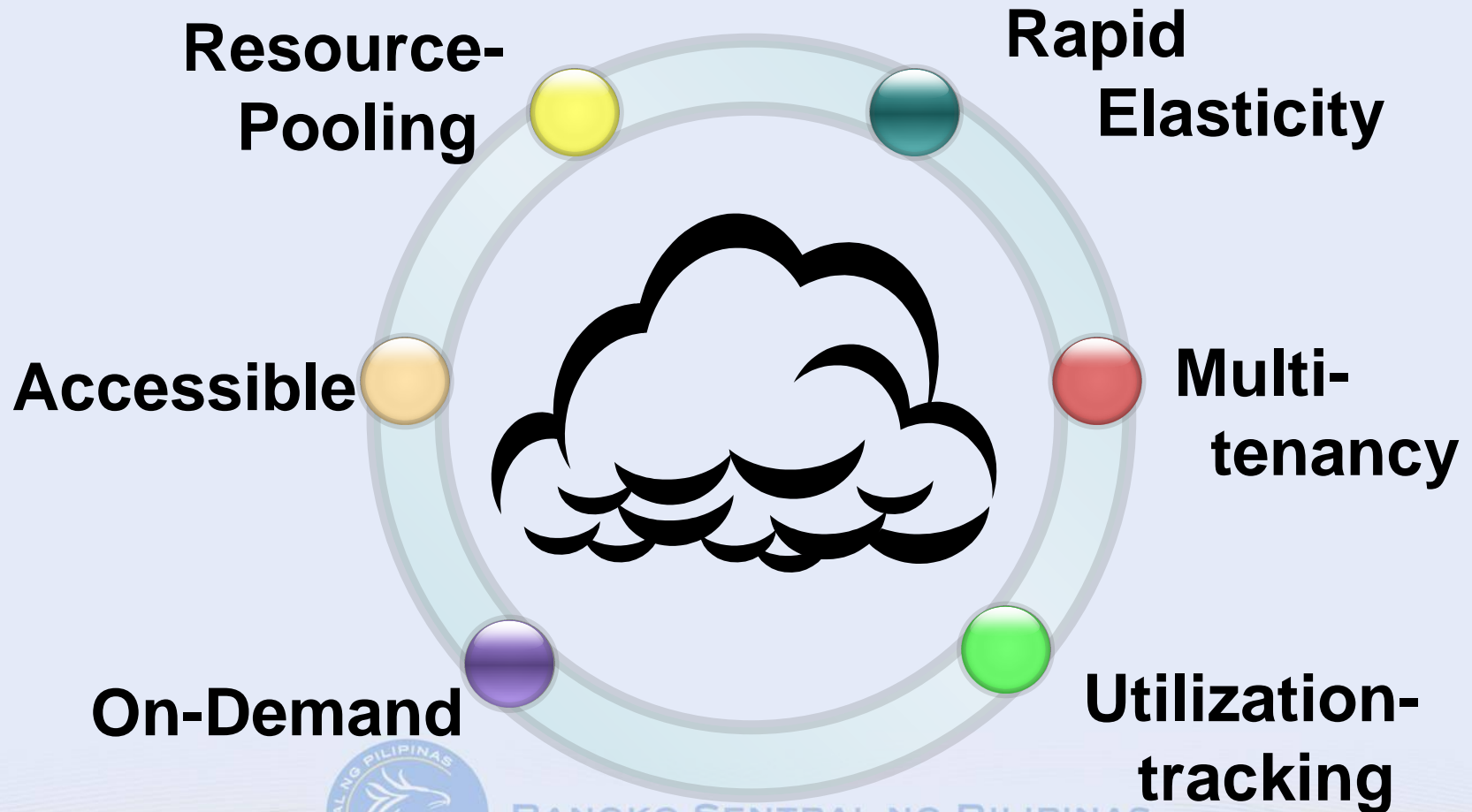
CLOUD COMPUTING

A model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources that can be rapidly provisioned and released with minimal management effort or service provider interaction.

NIST

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Essential Attributes of Cloud Computing

Resource-Pooling

Rapid Elasticity

Accessible

Multi-tenancy

On-Demand

Utilization-tracking

BSP policy Action on Cloud Computing

CORE SERVICES >
- ✔ Private
- ✔ Community
- ✔ Hybrid
- ? Public

NON-CORE SERVICES >
- ✔ Private
- ✔ Community
- ✔ Hybrid
- ✔ Public

BSP POLICY ACTION ON OFFSHORE OUTSOURCING

Subsection X162.7 **Offshore Outsourcing**. Offshore outsourcing exists when the service provider is located outside the country. x x x x. In addition, <u>offshore outsourcing of bank's domestic operations is permitted only when the service provider operates in countries which uphold confidentiality</u>. x x x x.

SUPERVISORY CONCERNS ON CLOUD COMPUTING

- Legal and Regulatory Compliance
- Governance and Risk Management
- Due Diligence/Vendor Management
- Security and Privacy
- Data Ownership and Data Location and Retrieval
- Business Continuity Planning

RATIONALE FOR ALLOWING CLOUD COMPUTING

- Leapfrog financial products & services

- Make innovation more affordable and accessible

- Level playing field

- Focus on core business

- Ensure business continuity and speed-up disaster recovery

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BSP POLICY ACTION ON CLOUD COMPUTING

When in doubt, Banks should consult BSP before making any significant commitment on cloud computing!

QUESTIONS??

THANK YOU!

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