IT Audit and Implementation

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Information System Audit and Accounting Program
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Background – Digital Growth

- 7.75 Billion (Population)
- 5.19 Billion (Connected)
- 4.54 Billion (Internet User)
- 3.8 Billion (Social Media)
Background – Global E-Commerce Activities

- 80% (Search Online)
- 90% (Visited Online Store)
- 74% (Purchase Online)
- 36% (Buy from Laptop or PC)
- 52% (Buy from Mobile)
Background – Indonesian Digital User

- 272.1 Million (Population)
- 338.2 Million (Connected)
- 175.4 Million (Internet User)
- 160 Million (Social Media)
Background – Indonesian Population by Age

- 272.1 Million (Population)
- 210.3 Million (13+ above)
- 187.1 Million (18+ above)
- 179 Million (16 to 64)
Background – Indonesian Device Ownership

- Smartphone: (96%)
- Mobile phone: (94%)
- Desktop: (66%)
- Tablet: (23%)
- Computer monitor: (5.7%)
- Game controller: (16%)
- Internet of Things (IoT): (7.8%)
- Smartwatch: (13%)
- VR glasses: (5.1%)
Attack on January - April 2020 (88,414,296 totally)

- Information Gathering (53%)
- Trojan Activities (41%)
- Exploit Kit (4%)
- Web Attack and Others (2%)
Facts and Stats 2019

- Data Breach 4.1 Billions records
- Hacker attacks every 39 seconds on average 2.244 times a day
- 57% of companies experienced social engineering and phishing attacks
- 53% of companies had over 1000 sensitive files open to every employee
- The Cost of Data Breach in the healthcare industry was the highest at US$ 6.5 million
- US$ 3.9 Million is the average cost of data breach worldwide and US$ 8.2 Million in the United States
- By 2021, there will be 3.5 Million unfilled Cyber Security and Audit Security Jobs Globally
Integrated Audit
IT Audit Definition (Steven D. Gantz, 2014)

International Organization for Standardization (ISO) guidelines on auditing use the term audit to mean a “systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled”

Information Technology Infrastructure Library (ITIL) glossary defines audit as “formal inspection and verification to check whether a standard or set of guidelines is being followed, that records are accurate, or that efficiency and effectiveness targets are being met.”
IT Audit Process

- Determine Response to Findings
- Develop Corrective Action Plan
- Monitor Corrective Action Activities
- Conduct Follow-Up (re-audit)
- Plan
  - Determine Scope and Objectives
  - Assign Audit Resources
  - Choose or Design Audit Procedures
  - Gather Data to Support Audit
- Perform
  - Examine Documentation
  - Collect and Review Evidence
  - Evaluate Controls (Observe and Test)
  - Analyze Information and identify issues
- Report
  - Prepare and document finding
  - Prepare Audit Workpapers
  - Recommend Corrective Actions
  - Finalize and Deliver Formal Audit Reports
- Respond
  - Determine Scope and Objectives
  - Assign Audit Resources
  - Choose or Design Audit Procedures
  - Gather Data to Support Audit
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### IT Audit Institution

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<td>American Institute of Certified Public Accountants (AICPA)</td>
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<td>The Institute of Internal Auditors (IIA)</td>
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<td>Information Systems Audit and Control Association (ISACA)</td>
<td>CISA, CISM, CGEIT, CRISC, CSX-P, CDPSE</td>
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<td>International Information Systems Security Certification Consortium (ISC2)</td>
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<td>The International Council of E-Commerce Consultants (EC-Council)</td>
<td>CEH, CHFI, LPT, ECSA</td>
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If everyone wants to create applications and software, then who will evaluate and secure it?
References

www.isaca.org [diakses 28 September 2020]
www.isc2.org [diakses 28 September 2020]
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