

Challenges and Opportunities of Digital Governance

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Indonesia in the Digital Space

survey on global internet users aged 16-64, around 46 countries

Indonesia Internet users:

- **74.4%** who have used an online service to order take-away food for delivery in the past month (**Highest in the world**)
- **79.1 %** who bought something online via a mobile device in the past month (**Highest in the world**)
- **87,1 %** who bought something online via any device in the past month (**Highest in the world**)
- **37.1%** who say they're worried about how companies use their personal data online (**rank 23**)



Emerging Technology Adoption

	Already Adopted	Within The Next Year	In 1-2 Years	In 3-5 Years	In 5+ Years	Never	Don't Know
AI	23%	8%	14%	11%	5%	3%	35%
AR/VR/XR	9%	4%	6%	5%	5%	11%	61%
Bio feedback	5%	2%	4%	4%	3%	18%	64%
Bio hacking	3%	2%	3%	3%	3%	22%	66%
Blockchain/digital currency	10%	4%	10%	10%	6%	8%	53%
Cellular technologies	21%	6%	10%	7%	3%	7%	47%
Close radio communications	10%	3%	6%	6%	2%	9%	63%
Cloud-enabled technologies	59%	8%	9%	5%	2%	1%	16%
Edge computing	13%	5%	7%	6%	3%	7%	59%
IoT	26%	6%	10%	7%	3%	6%	42%
Quantum computing	3%	2%	4%	5%	6%	9%	70%
Robotics	25%	4%	8%	6%	4%	9%	44%
Wearable technology	10%	4%	5%	5%	4%	10%	61%

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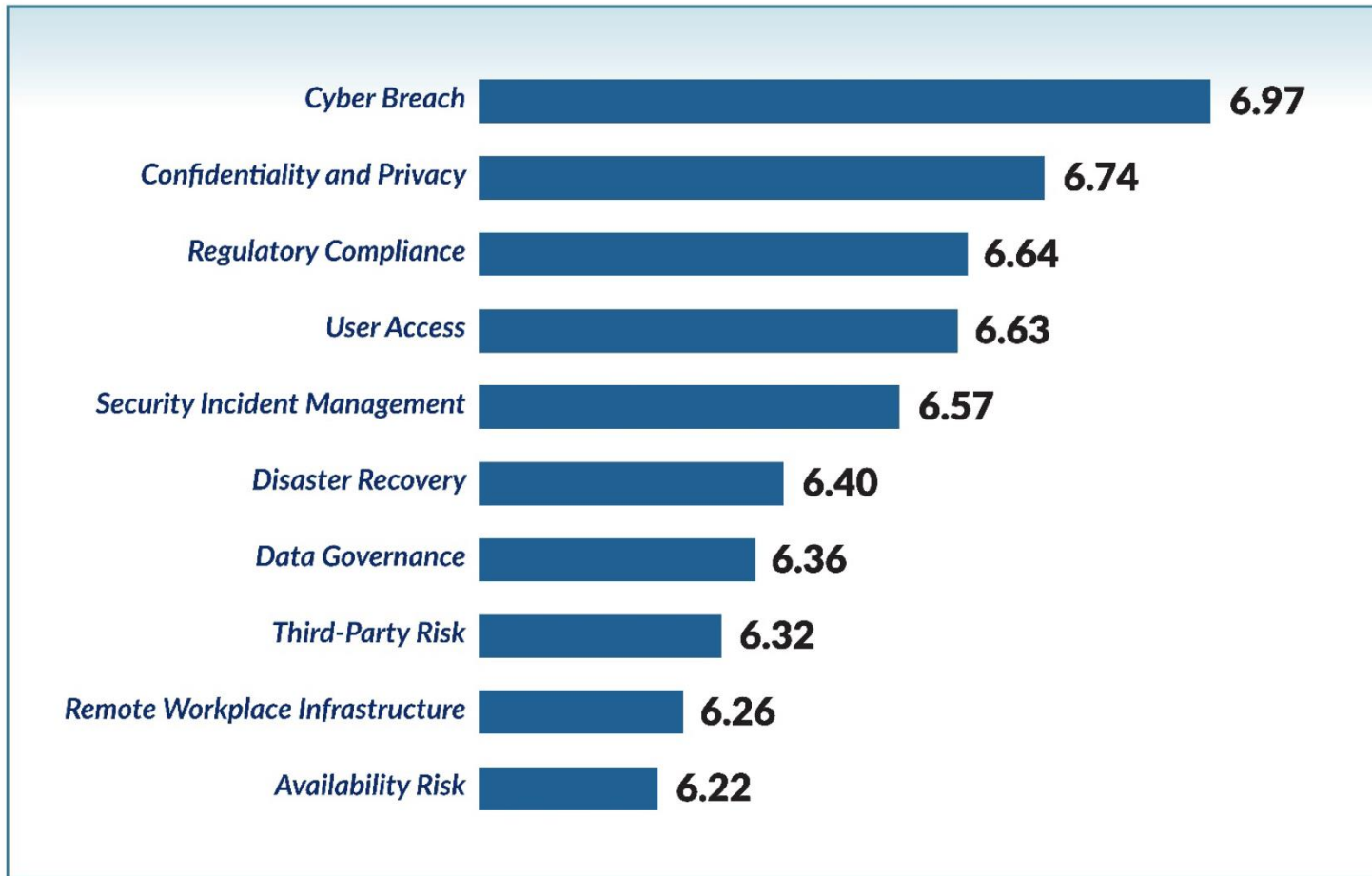
The Pulse – Emerging Technology 2021

High Adoption of Cloud technologies, IoT, Robotics, AI and Cellular.



Global Top 10 Technology Risk 2021

ISACA survey on more than 7400 global respondents of audit and risk leaders



* About our top technology risks scale: Respondents were asked to rate the significance of 39 technology risk issues on a scale of 1 to 10, based on their organization's technology risk assessment, with "1" representing low impact to the organization and "10" representing extensive impact to the organization. Data points represent the mean score.

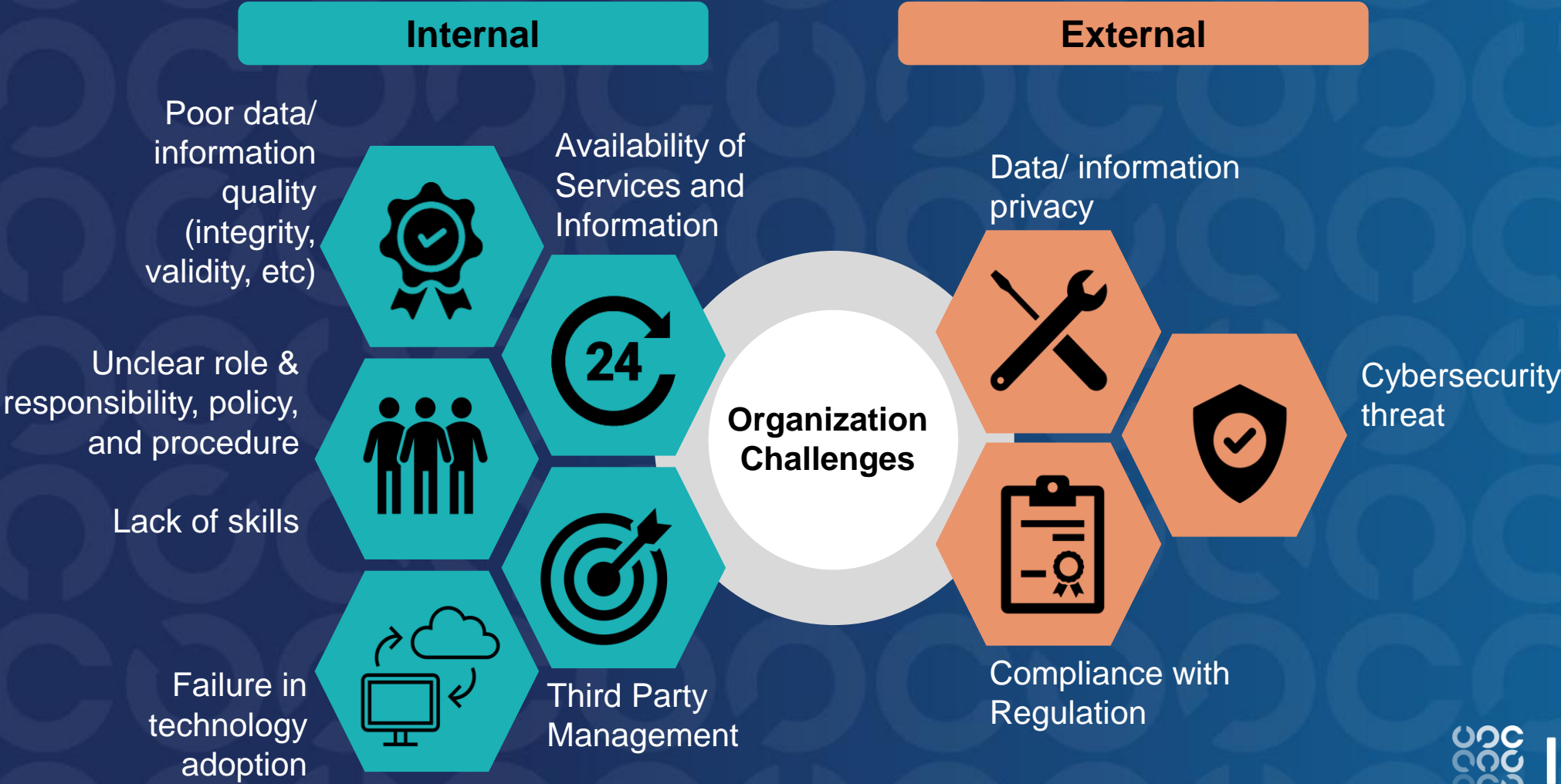
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Global Top 10
Technology Risk 2021.

Security, privacy and
resilient technologies
dominate the top
technology risks



Our Challenges, and Opportunities?

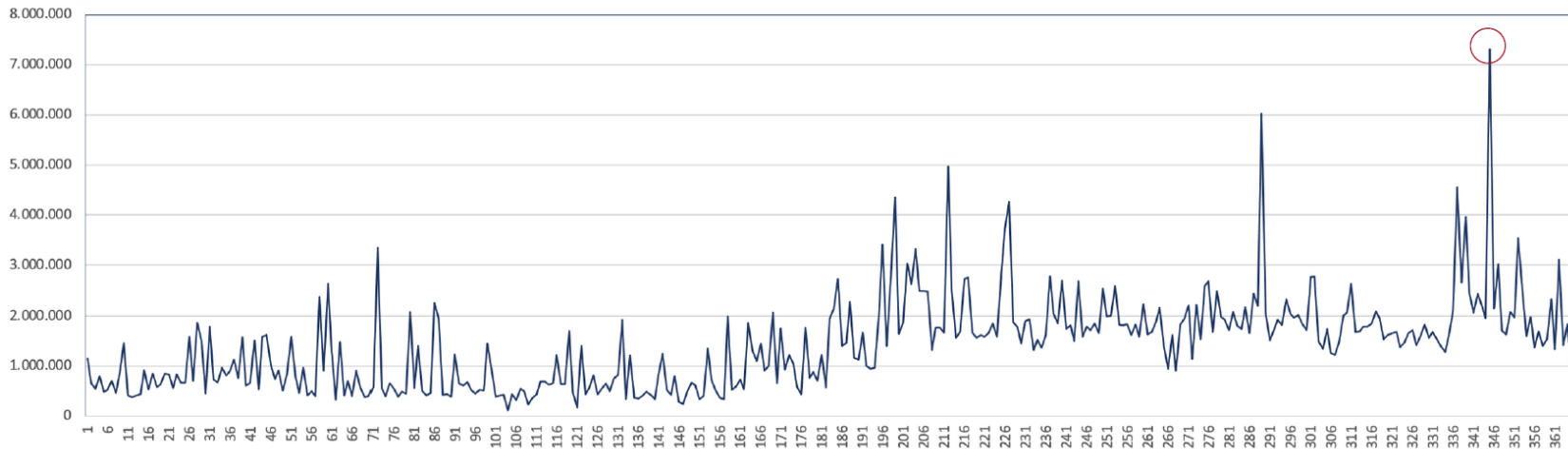


Ancaman Keamanan Siber di Indonesia

495.337.202

ANOMALI TRAFIK SELAMA TAHUN 2020.

ANOMALI TRAFIK TERTINGGI TERJADI PADA TANGGAL 10 DESEMBER 2020
DENGAN JUMLAH MENCAPAI 7.311.606 ANOMALI.



GRAFIK ANOMALI TRAFIK YANG TERJADI SEPANJANG TAHUN 2020

Kasus Data Breach:

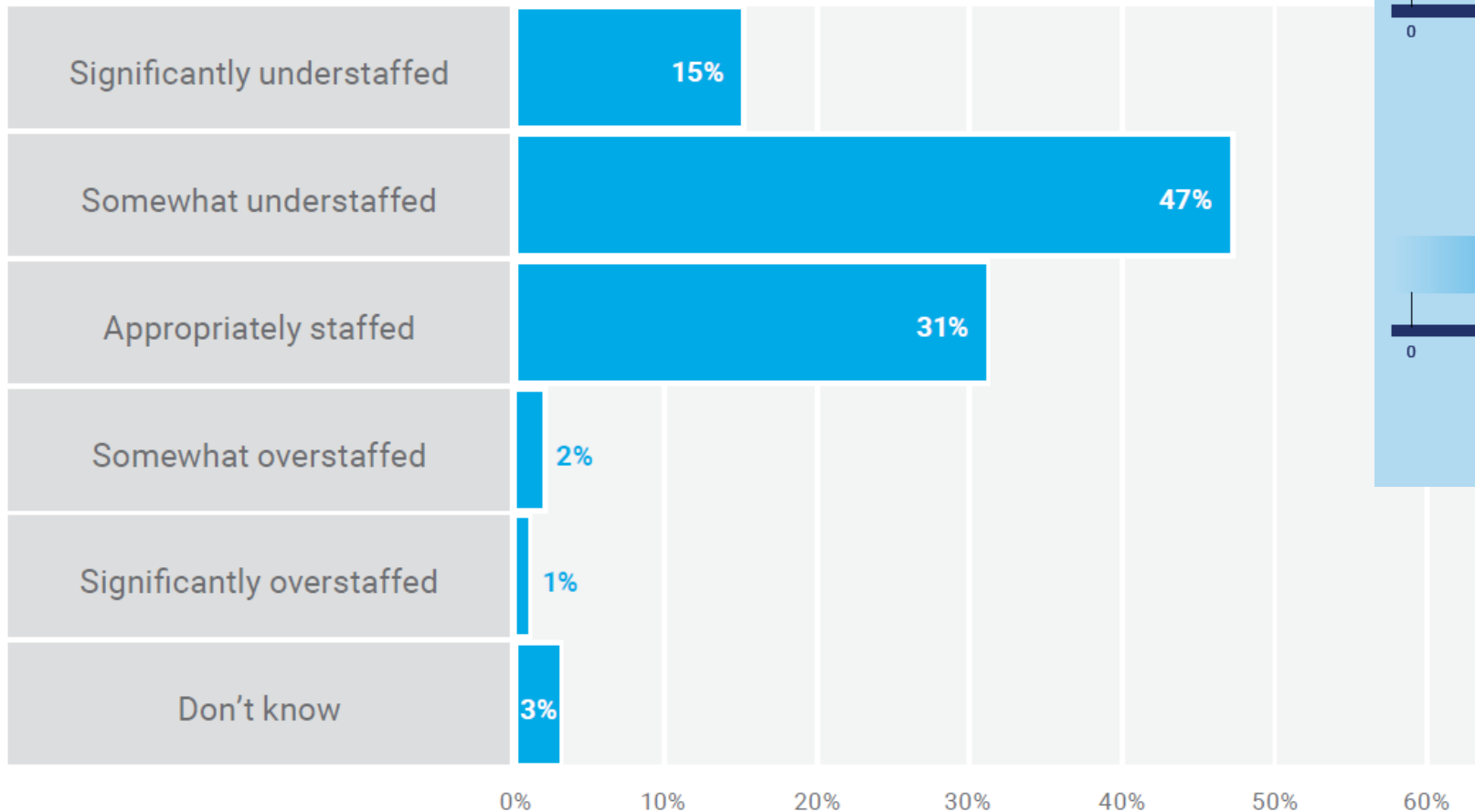
MEI	TOKOPEDIA 91.000.000 Data
NOV	RED DOORZ 5.800.000 Data
NOV	CERMATI 2.900.000 Data
JUL	KREDIT PLUS 890.000 Data

TOP 10 SOURCE COUNTRY

- | | |
|---|--|
|  1. Amerika Serikat
128.713.177 |  8. Australia
14.743.994 |
|  2. Cina
77.932.296 |  7. Rusia
12.413.645 |
|  3. Indonesia
64.383.427 |  8. Prancis
10.836.667 |
|  4. Belanda
33.951.728 |  9. Kanada
6.929.714 |
|  5. Korea Selatan
14.869.260 |  10. Jerman
5.058.412 |

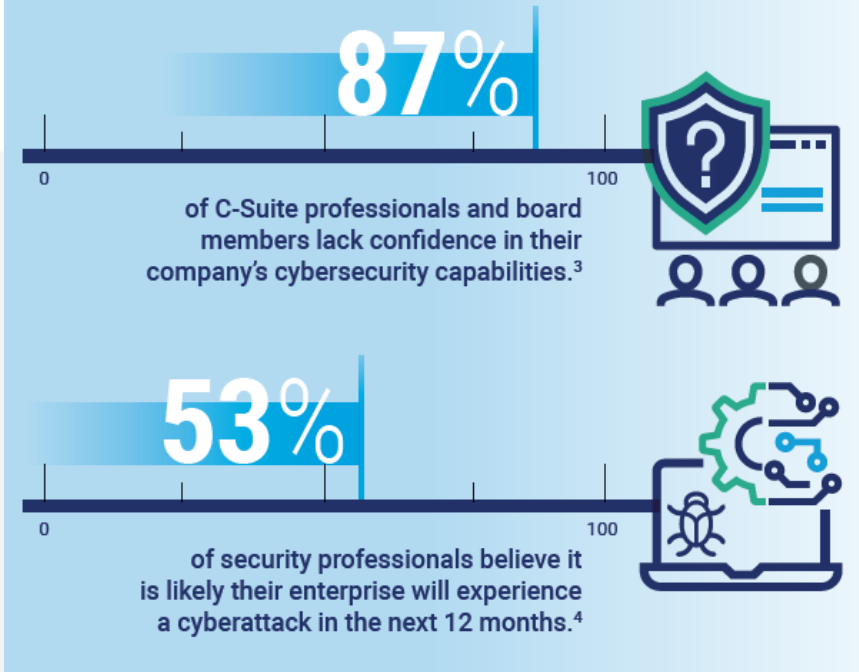
Sumber: Laporan Hasil Monitoring Keamanan Siber 2020 - BSSN

Lack of Supply of Capable Cybersecurity Professionals



Sumber: ISACA State of Cybersecurity 2020

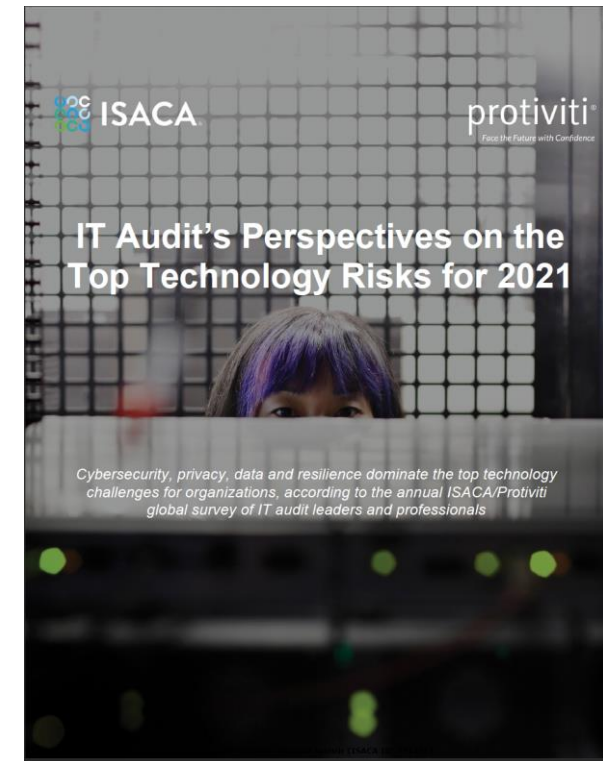
... But Confidence Is in Short Supply



Most of the problems is in the lack of competent professionals

Notable Findings on Top Technology Risks for 2021

- **Security, privacy and resilient technologies dominate the top technology risks** – These issues, which already were top-of-mind risks for most organizations, have been heightened by pandemic-driven times of remote work and new business processes, as well as increasing connectivity via the Internet of Things (IoT). The highest-rated risks also represent higher-velocity issues for organizations.
- **Digital Leaders stand out** – Organizations at a higher level of digital maturity, understanding the need for dynamism in the current business environment, generally view the top technology risks to be more significant compared to other organizations, and they are far more likely to perform continuous audit risk assessments.
- **COVID-19 and digital transformation are driving more frequent technology risk assessments** – As expected, IT audit groups are refreshing technology risk assessments more frequently in response to pandemic-related impacts and digital transformation-driven changes in the organization.



Governing the Digital Business

COBIT 2019 – Governance Framework and Objectives



! Value Creation:

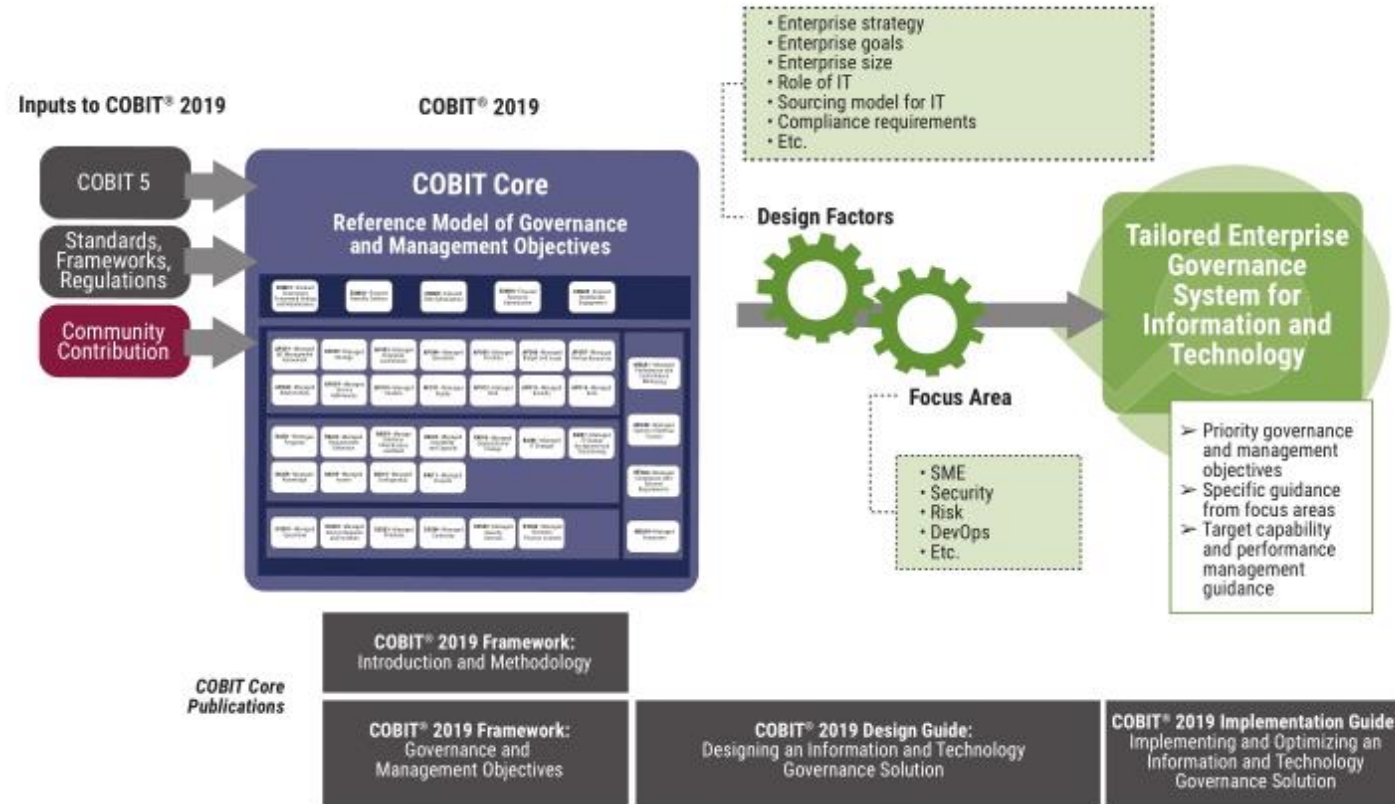
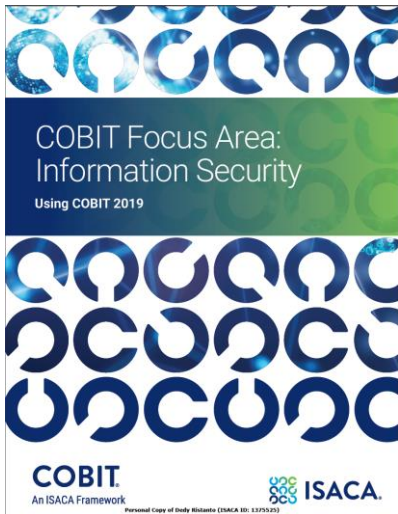
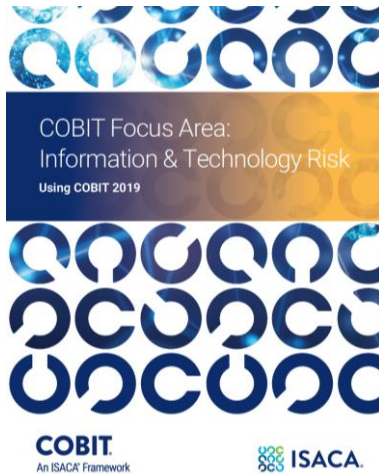
- **Benefits Realization:** Creating value for the enterprise through I&T
- **Risk Optimization:** This entails addressing the business risk associated with the use, ownership, operation, involvement, influence and adoption of I&T within an enterprise.
- **Resource Optimization:** This ensures that the appropriate capabilities are in place to execute the strategic plan and sufficient, appropriate and effective resources are provided



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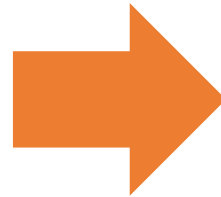
Ensuring Governance System is Effective and Addressing Current Challenges and Opportunities



addresses the basic fact that information security is essential in the day-to-day operations of enterprises. Breaches in information security can lead to a substantial impact within the enterprise through, for example, financial damages or operational deficiencies. Breaches can expose the enterprise to external impacts such as reputational, legal and regulatory risk, and jeopardize customer and employee relations—or even the survival of the enterprise itself.

Key Takeaways

- Governance is always important, but it need to be relevant with current challenges
- Changes happens very fast, organization risks and opportunities should be closely monitored.
- People is the weakest link, but also the strongest defense.



Let's be relevant with current trends and knowledge



Our biggest Problems is not knowing that we don't know

Virginia Satir



COBIT
An ISACA® Framework

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FUNDAMENTALS**
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CCAK
Certificate of Cloud Auditing Knowledge

CSX
CYBERSECURITY NEXUS

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SECURITY
AUDIT**
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