**The 16th Meeting of the INTOSAI Working Group
on Fight Against Corruption and Money Laundering (WGFACML)**

EMPOWERING THAILAND'S DIGITAL GOVERNMENT: AI INTEGRATION FOR ANTI-CORRUPTION MEASURES AT SAI THAILAND

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1. Overview of Thailand's Digital Landscape

Phase 1 — Digital Foundation

Thailand invests and builds a foundation for developing a digital economy and society.

Phase 2 — Digital Thailand I:

Inclusion
All sectors of Thailand have participated in the digital economy and society following the way of a civil state.

Phase 3 — Digital Thailand II:

Full Transformation
Thailand enters the state of digital Thailand which drives and utilizes digital innovations to their full potential.

Phase 4 — Global Digital Leadership

Thailand has become a developed country with the capacity to use digital technologies to create economic and social values sustainably

The Royal Government Gazette No.136 Chapter 47 A, 11 April, 2019 B.E.2562 (2019)

Subject The Policy and National Plan on Digital Development for Economy and Society

ประกาศ

เรื่อง นโยบายและแผนระดับชาติว่าด้วยการพัฒนาดิจิทัลเพื่อเศรษฐกิจและสังคม

สมเด็จพระเจ้าอยู่หัวมหาวชิราลงกรณ บดินทรเทพยวรางกูร

สมเด็จพระเจ้าอยู่หัวมหาวชิราลงกรณ บดินทรเทพยวรางกูร มีพระราชโองการโปรดเกล้าโปรดกระหม่อม
ให้ประกาศว่า

โดยที่คณะรัฐมนตรีได้พิจารณาเห็นสมควรให้ประกาศใช้นโยบายและแผนระดับชาติว่าด้วย
การพัฒนาดิจิทัลเพื่อเศรษฐกิจและสังคม ตามบทบัญญัติมาตรา ๕ แห่งพระราชบัญญัติการพัฒนาดิจิทัล
เพื่อเศรษฐกิจและสังคม พ.ศ. ๒๕๖๐ ซึ่งมีความสอดคล้องกับแผนแม่บทภายใต้ยุทธศาสตร์ชาติ
ดังมีสาระสำคัญตามที่แนบท้ายนี้ จึงทรงพระกรุณาโปรดเกล้าโปรดกระหม่อมให้ใช้นโยบายและแผน
ระดับชาติว่าด้วยการพัฒนาดิจิทัลเพื่อเศรษฐกิจและสังคม ตั้งแต่วันถัดจากวันที่ประกาศในราชกิจจานุเบกษา
จนถึงวันที่ ๓๐ กันยายน ๒๕๘๐

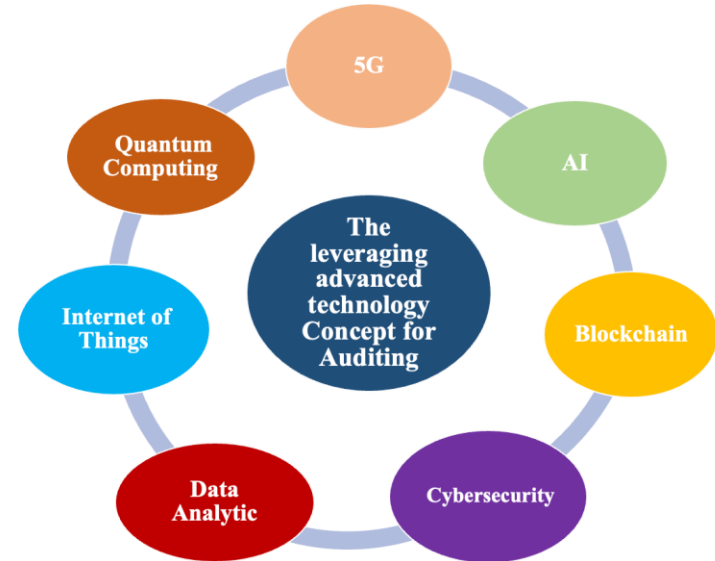# 2. Understanding Corruption in a Digital Government

Potential opportunities for corruption and unethical practices that could happen in a digital government:

- ☐ **Cybersecurity Breaches**
- ☐ **Insider Threats**
- ☐ **Bribery for System Access or Control**
- ☐ **Bid Rigging and Fraud in Procurement**
- ☐ **False Claims and Identity Theft**
- ☐ **Misuse of E-Government Services**

- ☐ **Algorithmic Bias and Discrimination**
- ☐ **Corrupt Use of Data**
- ☐ **Inadequate Oversight and Regulations**
- ☐ **Conflict of Interest and Nepotism**
- ☐ **Lack of Digital Literacy and Awareness**

3. SAI Thailand's response to the Thai Government digital transformation

นโยบายการตรวจเงินแผ่นดิน
(พ.ศ. ๒๕๖๖ - ๒๕๗๐)

คณะกรรมการตรวจเงินแผ่นดิน

SAO State Audit Policy
2023-2028

The Concept of 5ABCDIQ

- 5G
- AI
- Blockchain
- Cybersecurity
- Data Analytic
- Internet of Things
- Quantum Computing
- The leveraging advanced technology Concept for Auditing

4. Understanding AI and its Capabilities in Anti-Corruption

AI technologies applicable to corruption detection and prevention

Machine Learning (ML), Natural Language Processing (NLP), Data Analytics, Network Analysis, Computer Vision, Predictive Analytics, Sentiment Analysis, Blockchain Technology, AI-powered Chatbots, Speech Recognition, Robotic Process Automation (RPA), Risk Assessment Algorithms.......

The term *artificial intelligence* (AI) covers technologies where machines mimic human intelligence to solve complex problems.

4. Understanding AI and its Capabilities in Anti-Corruption

4.1 Success stories of AI application in anti-corruption initiatives globally

- ☐ **South Africa evaluating AI as a tool to monitor tax compliance.**

- ☐ **India planning to use AI to compare social media 'flashing' and tax records.**

- ☐ **Machine learning tool indicating probability of corrupt civil servants in Brazil.**

Source:
- ***2019** Artificial Intelligence – a promising anti-corruption tool in development settings?*
- *https://www.u4.no/publications/artificial-intelligence-a-promising-anti-corruption-tool-in-development-settings.pdf*

4. Understanding AI and its Capabilities in Anti-Corruption

4.2 Application of AI in Anti-corruption in SAIs

- **Use of predictive models to assess the risk of irregularities: Brazil, India, South Africa**

- **Manipulation and other uses of data to identify corruption: Brazil, Ecuador, France, Hungary, Chile, South Africa, India, Philippine**

Source:
- *2022 Enhancing Collaboration between Supreme Audit Institution and Anti-Corruption Bodies*
- *https://www.unodc.org/documents/corruption/Publications/2022/Enhancing_collaboration_between_Supreme_Audit_Institutions_and_Anti-Corruption_Bodies_EN.pdf*

5. Potential Applications of AI in SAI Thailand for Anti-Corruption

5.1 Artificial Intelligence for Performance Audit (AI for PA)

Source:
- *2021 Annual Audit Report*
- *https://www.audit.go.th/th/multimedia/*

5. Potential Applications of AI in SAI Thailand for Anti-Corruption

5.1 Artificial Intelligence for Performance Audit (AI for PA) (Cont.)

Analytics Architecture of AI for PA

Sourcing	Processing	Results

10,000 PA Reports

Digital Data

AI model, called
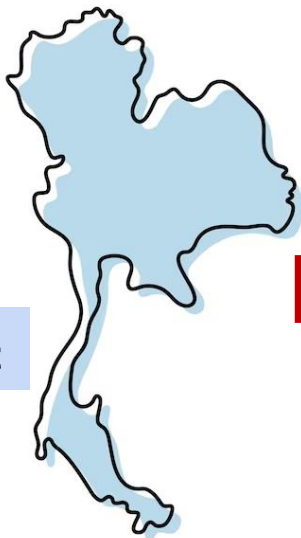"Natural Language Processing"

- **Enhancing the accuracy of data analysis**
- **Facilitating rapid data access**
- **Identifying data relationships**

5. Potential Applications of AI in SAI Thailand for Anti-Corruption

5.2 AI Project in the Future

e-government

National e-Payment

e-Payment
ขับเคลื่อนไทยทุกภาคส่วน
สู่'Digital Economy!'

5. Potential Applications of AI in SAI Thailand for Anti-Corruption

5.2 AI Project in the Future (Cont.)

Irregularities in Electronic Financial Transactions

Source:
- https://www.naewna.com/local/711001
- https://mgronline.com/crime/detail/9660000005739
- https://www.pptvhd36.com/news/%E0%B8%81%E0%B8%B2%E0%B8%A3%E0%B9%80%E0%B8%A1%E0%B8%B7%E0%B8%AD%E0%B8%87/198699

5. Potential Applications of AI in SAI Thailand for Anti-Corruption

5.2 AI Project in the Future (Cont.)

Test of Control on the Payment System

5. Potential Applications of AI in SAI Thailand for Anti-Corruption

5.2 AI Project in the Future (Cont.)

AI Project for Detecting the Anomaly of e-Payment

SAI Thailand Research Team
- If they can **analyze the testing results to identify patterns of corruption**, it will be very beneficial for the development of AI systems capable of detecting corruption in the future.

AI for Anti-Corruption

6. SAI Thailand: Expected Outcomes and Benefits of AI

- Enhanced efficiency and accuracy in audits.

- Proactive detection of corruption risks.

- Increased utilization of Big Data in audits.

- Strengthened public trust in government operations.

- Further Advances towards a data-driven nation.

7. Conclusion

THANK YOU

State Audit Office of the Kingdom of Thailand