To combat corruption through swift and sure, firm but fair action.

Effective Use of Technology in Enhancing Cross-Border Cooperation between LEAs.

SINGAPORE
The Corrupt Practices Investigation Bureau

- Sole Anti-Corruption Agency in Singapore
- Functionally independent & reports to the PM
- Investigate all crimes in the course of PCA investigation
- Deal with both private & public sectors
- Deal with both giver & receiver
- No consideration for status or taking of any sides
- Regardless of whether offence is committed in Singapore or abroad
- Investigate anonymous complaints
- No case too big or small
- No statute of limitations

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CPIB’s Journey in Digital Forensics

- **2004**: Part-time Unit
  - Officers taking on secondary roles as forensic examiners

- **2010**: Full-time Branch
  - Forensic Capabilities
    - Computer Forensics
    - Mobile Phone Forensics

- **2018**: New Forensic Capabilities
  - Cloud Forensics
  - Video Forensics

- & Beyond

**The Aim**

 Equip the Bureau with more forensics capabilities to deal with trending & emerging technological advancements to uncover digital evidence.
To combat corruption through swift and sure, firm but fair action.

**CPIB’s Journey in Digital Forensics**

The Route Taken

- **The Basics**
- Majority of caseload, till today

**TIME**

**COMPLEXITY**

1. **FORENSIC (Computer & Mobile)**

Beginning
To combat corruption through swift and sure, firm but fair action

CPIB’s Journey in Digital Forensics

The Route Taken

1. FORENSIC (Computer & Mobile)

2. FORENSIC (Cloud & Multimedia)

Current Trends
More and more cloud storages and emails (e.g., Gmail) can be seen

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CPIB's Journey in Digital Forensics

The Route Taken

1. FORENSIC (Computer & Mobile)

2. WEB REVIEW

3. INVESTIGATIVE LAB
   - Highly-scalable and secure collaborative investigative method

- Collaboration
- Current Trends
- Beginning
To combat corruption through swift and sure, firm but fair action

CPIB’s Journey in Digital Forensics

The Route Taken

1. FORENSIC (Computer & Mobile)
   - Complexity:
   - Forensic (Cloud & Multimedia)

2. WEB REVIEW
   - Analytics & Intelligence
   - Collaboration
   - Current Trends
   - Beginning

3. FORENSIC ANALYTICS PLATFORM
   - Deep dive across web, mobile, social data, with automated correlation of findings

4. ANALYTICS & INTELLIGENCE
   - Analytics & Intelligence

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CPIB’s Journey in Digital Forensics

Technical Groups that CPIB is part of

- Local Digital Forensics Group (DFG): Pioneer member, consists of domestic LEAs & forensic practitioners
- INTERPOL Digital Forensics Expert Group Meeting
- Access to EUROPOL Platform for Experts (EPE) website: LEAs sharing on Digital Forensics, OSINT & Crypto-currency
- Asian Forensic Sciences Network (AFSN) Meeting
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**Evidentiary Value of Digital Forensic Materials**

**Computer**
- E.g., Desktop Computers, Laptops, Mass Storage devices
- Evidentiary Value:
  - Emails
  - Documents (e.g., Word, Excel, PDFs)

**Mobile**
- E.g., Phones & Tablets
- Evidentiary Value:
  - Chats
  - Video/Audio recordings
  - Images

**Video**
- E.g., Phone Recordings & CCTV
- Evidentiary Value:
  - Blurry video/images
  - Correct Perspective
  - Colour Enhancement

**Cloud**
- E.g., Gmail & Dropbox
- Evidentiary Value:
  - Emails
  - Files & Documents
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**CPIB DFB’s Analysis Approach**

**Relationship Driven Analysis**
- Combining different devices across different persons into a single interface
Case Sharing

• Sharing with domestic counterparts
• Sharing with foreign counterparts
• Overcoming challenges encountered
Thank You