ESCAP
Economic and Social Commission for Asia and the Pacific

National Statistical Office

The Asia-Pacific Stats Café on
"Balancing Access and Confidentiality:
The Role of Synthetic Data in Official Statistics"

# Why we need Synthetic Data

**Monday, 16 September 2024**
14:00 to 15:15 p.m. (Bangkok time)

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# TNSO Vision

**"To be the main national organization in the management of the statistics system for the development of the country"**



**Standardized statistical production**

TNSO produces reliable statistics through data collection, analysis, and dissemination for informed policy and research.



**Efficient management of the national statistical system**

TNSO leads system management, collaborating with government agencies to ensure timely, reliable data.




**Promotion of statistical data services**

TNSO enhances access to high-quality data, supporting decision-making and national development.

# How TNSO protects personal data collected from surveys ?

- **Anonymization:**
  Modify or remove data that can directly or indirectly identify individuals.

- **Encryption:**
  Encode sensitive data to make it unreadable without the decryption key.

- **Delete Columns:**
  Permanently remove unnecessary or sensitive columns from the dataset to prevent access to personal information.







## TNSO requires synthetic data for several reasons

1. Ensuring data privacy and confidentiality.
2. Complying with data protection regulations.
3. Facilitating joint data analysis across multiple projects.
4. Enhancing data access for research and policymaking.
5. Addressing budget and resource constraints.





## Benefits:

- Safeguarding personal information.
- Mitigating data security risks.
- Increasing flexibility in data utilization.
- Supporting training and testing purposes.
- Enabling collaborative data analysis.
- Enhancing operational efficiency.

# Next Step



## Generating Synthetic Data for customer service

Synthetic data is generated as a substitute for personal data to support data users across various sectors, offering an alternative to microdata traditionally collected through surveys

## Joint Analysis of Synthetic Data from Multiple Survey Projects

The joint analysis of synthetic data from multiple surveys enables comprehensive insights, ensures privacy protection, and enhances data quality through safe integration of diverse survey datasets.

## Tools and Technology

- **Analytics tools**
- **Artificial Intelligence and Machine Learning**

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# THANK YOU

## FOR YOUR ATTENTION AND PARTICIPATION



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