

# KOSTAT's Big data

- Strategy and Training -

**Statistics Korea**

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# Overview

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## → Definition

“High volume, velocity of data that demand cost-effective, innovative forms of processing for enhanced insight and decision making”

(UNECE, 2013)

# Strategy

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## \* Producing various statistical information

### 1. Linking public and private big data

- Population Census + Health insurance data
- Business survey + Tax data

### 2. Providing new statistics and supplementing existing statistics

- Supplementing official statistics (Online price index)
- Supporting policy decision(Overdue electricity charge)

# Strategy

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## \* Establishing framework and cooperation

### 3. Establishing legal and institutional framework

- Revision of statistical law
- Statistical Data Center

### 4. Enhancing external cooperation

- Statistics-strategy Forums
- Statistics Netherlands(MOU in 2016)

# Training

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- ➔ Statistics Training Institute(STI) is an organization of take charge in statistical training

Every year, STI trains around 42,000 persons from both governmental and non-governmental agencies.

There are several courses related to Big data.

Understanding of Big data and administrative data for Basic, Big data and Practice for intermediate, Big data statistics for advance.

# Big data course of STI

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- ✦ Understanding of Big data and administrative data
  - The course for beginners and is composed of Big data definition, Status of Big data utilization and so on,,
- ✦ Big data Practice
  - The course for intermediates and is composed of Big data analysis technology, Visualization using R,,,
- ✦ Big data Statistics
  - The course for experts and is composed of statistical methodology using Big data, team project,,,

# Big data course of STI with UNSIAP

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➔ KOSTAT plan to open a Big data course with UNSIAP.

Provides lectures to cover three main topics drawn from KOSTAT's big data initiatives

- Big data Sources
- Big data Analysis Techniques
- Cases of Big data based statistical production



# Big data course of STI with UNSIAP

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- ✦ Big data Sources
  - An introduction to the concepts, types and technologies for big data
- ✦ Big data Analysis Technology
  - Structures data analysis(online price index)
  - Non-structure data analysis(SNS sentiment index)
- ✦ Cases of Big data based statistical production
  - A micro-database of households debt
  - Migrant population analysis

# Big data course of STI with UNSIAP

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- ➔ The framework of the curriculum will be designed by KOSTAT in consultation with UNSIAP

The staff of KOSTAT will be in charge of the lecture on an administrative data and cases of big data analysis

The professors will be in charge of the theoretical lectures such as concept, structures data analysis.

# Conclusion

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**There were many obstacles when we open the big data course.**

**- curriculum, contents, lecturers and so on,,**

**→ Communication between government agencies , universities and private organizations is important to solve the problem.**

Thank you very much!!