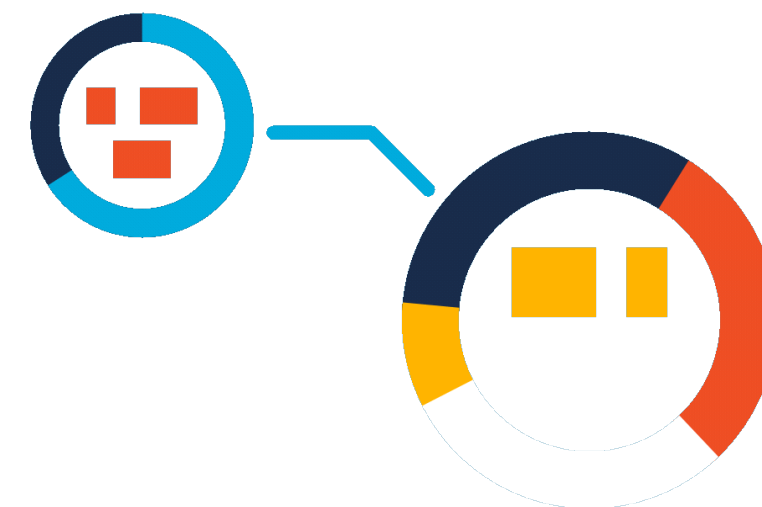
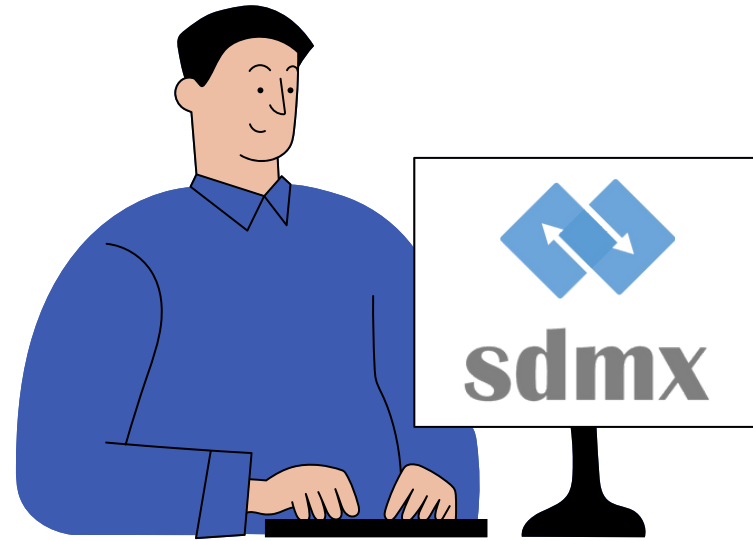


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# Using Power BI to automate Dashboard



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National Statistical Office  
Thailand



# Today's Agenda

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Action Items

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Introduction to STATHUB

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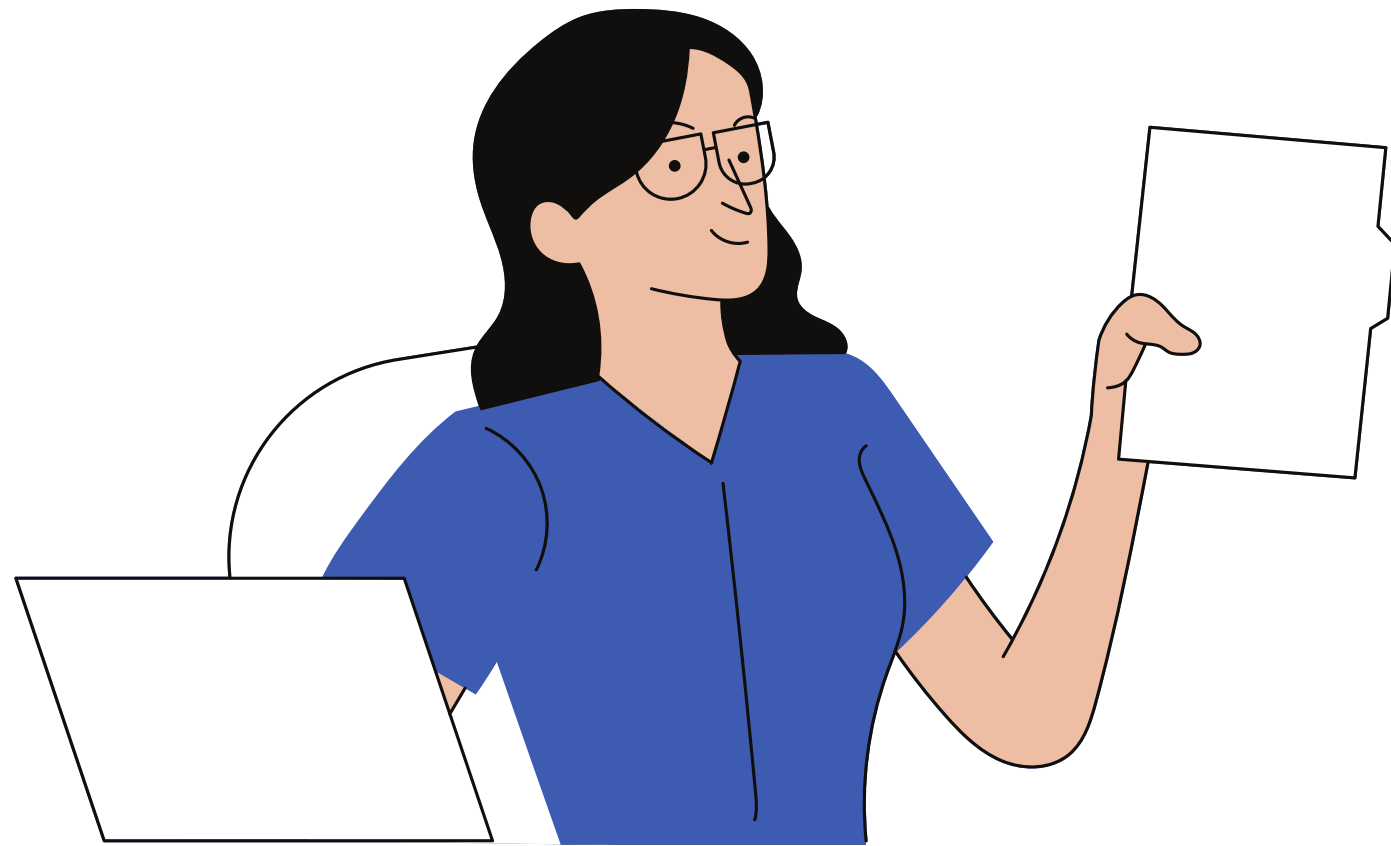
Condition

6

Next Steps

# Action Items

Using Microsoft Power BI to automatically pull data for dashboard



01

Find and get SDMX data API

02

Import data by using sis-cc SDMX connector in Microsoft Power BI

03

Publish dashboard report and configure a refresh schedule

# Introduction

The Government Strategic Information Center, under the National Statistical Office of Thailand, has been developing the Statistics Sharing Hub to serve as the center for sharing statistical data using the SDMX standard. This web portal is powered by the .Stat suite.

## Statistics Sharing Hub

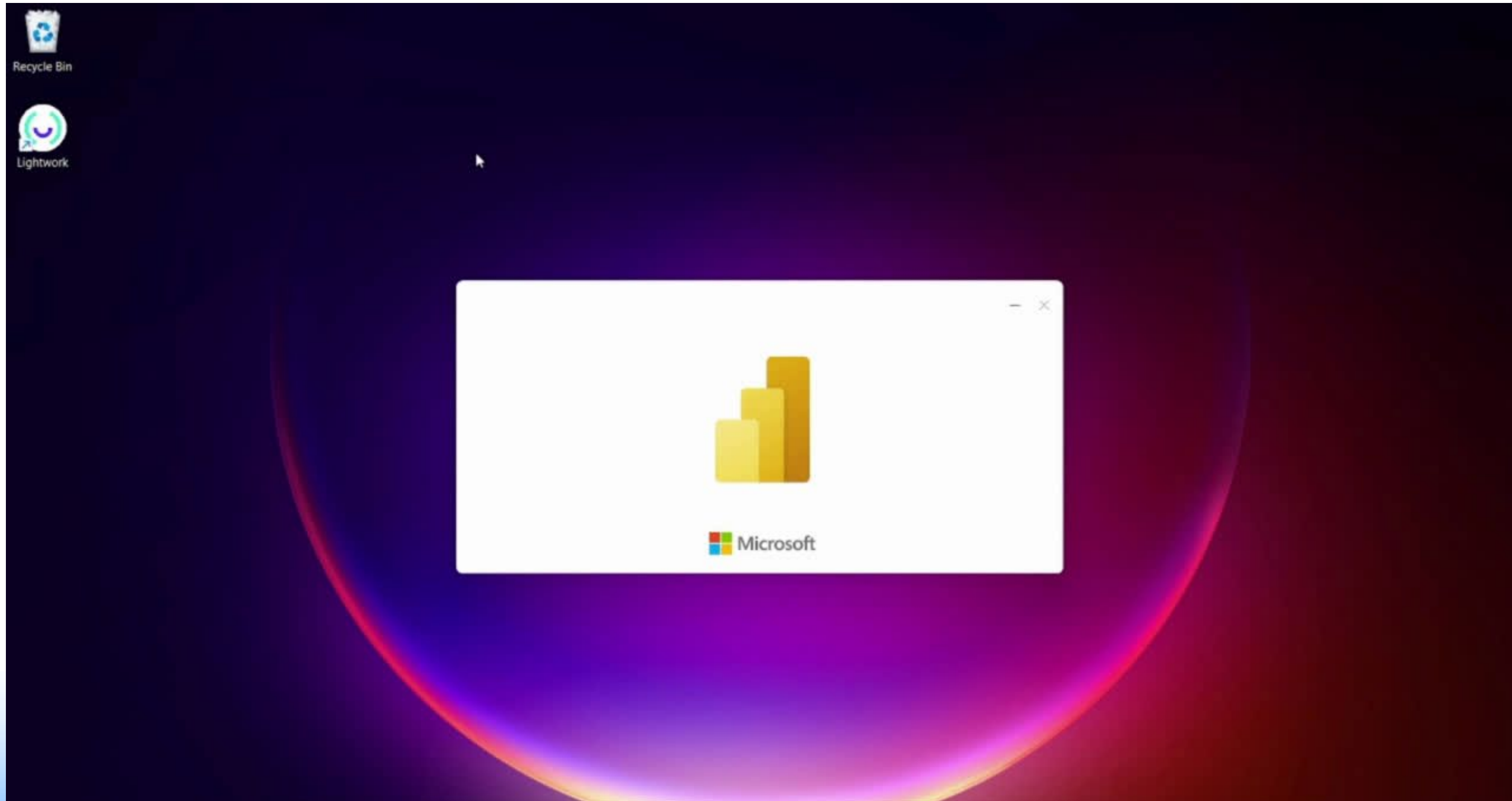
The screenshot displays the Statistics Sharing Hub website. At the top left is the NSO National Statistical Office logo. The main header features the 'Explorer' logo with a line graph and the text '.Stat Data Explorer' and 'Find, access and share data...'. A search bar with the placeholder 'Search by keywords' is prominent. Below it, a 'Browse by' section includes dropdown menus for 'International Indicators', 'Master Plan under the National Strategy', 'Statistical Sectors', and 'Province'. On the right, there is a circular graphic with the 'STATISTICS SHARING HUB' logo and Thai text. The footer contains the text 'Powered by the .Stat Suite | GD Catalog' and 'The .Stat Suit JS@xray(NET@funfetti) is open-source ,Deployed@TNSO 20 October 2023.'

<https://stathub.nso.go.th/>

# How to create a query to use on SDMX connector

The screenshot displays the NSO Explorer interface. At the top left is the NSO logo (National Statistical Office). The main header is blue with the 'Explorer' logo. Below the header, there's a navigation link '< Back to the search results'. On the left, a 'Filters' sidebar lists: Time Period (6/6), Competitiveness Ranking (all/2), Factor by IMD (all/8), Sub Factor by IMD (all/30), IMD indicators (all/55), and Country (1/8). The 'Used filters' section shows: Country: Thailand, Frequency: Annual, Time Period: Start: 2560. Below this are view options: Overview, Table, Chart, Labels, Download, Developer API, and Full screen. The main content area shows 'Competitiveness Ranking Dataflow' with details: Competitiveness Ranking Dataflow, Frequency: Annual, Competitiveness Ranking • Factor by IMD • Sub Factor by IMD • IMD indicators • Country, Master Plan under the National Strategy: Future Industries And Services, International Indicators: World Competitiveness Ranking, World Digital Competitiveness Ranking, Total number of available data points: 1336, Last updated: September 12, 2023. At the bottom, it says 'Powered by the .Stat Suite | GD Catalog' and 'The .Stat Suit JS@xray(NET@funfetti) is open-source ,Deployed@TNSO 20 October 2023.'

# How to import data to Power BI



# How to keep your dashboard updated automatically

The screenshot displays the Microsoft Power BI Desktop interface. The main window shows a line chart titled "Sum of OBS\_VALUE by Time Period". The Y-axis is labeled "Sum of OBS\_VALUE" and ranges from 1500 to 3500. The X-axis is labeled "Time Period" and shows values from 2560 to 2563. The chart shows a steady decline from approximately 3400 at 2560 to 1600 at 2563.

The right-hand side of the interface features three panels:

- Filters:** Contains a search bar and sections for "Filters on this visual", "Filters on this page", and "Filters on all visuals". The "Filters on all visuals" section includes "Sum of 'Query1' [OBS\_VALUE]".
- Visualizations:** Contains a search bar and a "Build visual" section with various chart icons. Below this, the "X-axis" is set to "Time Period", the "Y-axis" is set to "Sum of OBS\_VALUE", and the "Secondary y-axis" is empty.
- Data:** Contains a search bar and a list of fields for "Query1". The fields are: Competitiveness..., Country, DATAFLOW, Factor by IMD, Frequency, IMD indicators,   $\Sigma$  OBS\_VALUE, Source, Sub Factor by IMD,  Time Period, and Unit.

The bottom of the interface shows a "Page 1" tab and a zoom level of 73%.

# Advantages



## Dashboards

- can make communicating information to the public easier to understand
- use reliable source from data owner
- use updating real-time data



## Officer

can reduce work burden from data updating

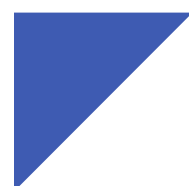


## Organization

- be a part of TNSO modernization
- support the driven of National Statistical System



# Utilization



The infographic features a central computer monitor displaying the Statistics Sharing Hub logo. It is surrounded by various icons: a tree on a tablet, a smartphone with binary code, and a tablet with the IMD logo. The background is light blue with binary code patterns.

Logos at the top: สำนักงานสถิติแห่งชาติ, STATISTICS SHARING HUB, GOVERNMENT DATA CATALOG SMART PLUS, sdmx, FMR

Text in Thai:  
ประเด็นการพัฒนา  
ความสามารถในการพัฒนา  
ด้านเศรษฐกิจดิจิทัลของไทย  
ประเทศไทยมีความสามารถ  
ในการแข่งขันด้านดิจิทัล  
ในด้านความพร้อมในอนาคต

โครงการพัฒนาสารสนเทศยุทธศาสตร์ภาครัฐ  
สำนักงานสถิติแห่งชาติ

สนับสนุนข้อมูลโดย ผู้ผลิตข้อมูลสถิติ (Data Provider)

Logos at the bottom: สำนักงานสถิติแห่งชาติ, depa, สดช., ETDA, and various university logos including NIETS, nsnb, and others.

sdmx | Statistical Data and Metadata eXchange

<https://stathub.nso.go.th/>

# Utilization





# Condition

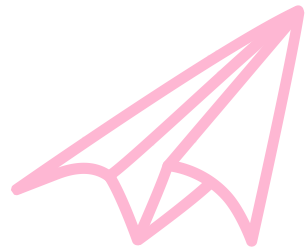
**TNSO has the Microsoft Power BI Pro License for officers.**

With the license, users can:

- create reports with Power BI Desktop
- publish reports to share and collaborate



Microsoft  
Power BI



# Next step



## Capacity building

- Government Agencies 
  - sharing knowledge with officers in the central government and the provincial government to create an automated dashboard using official statistics with SDMX API
- Public 
  - create a training course in **Thai MOOC**

**Noted:** Thai MOOC (Thailand Massive Open Online Course Platform) is lifelong learning space for all.

**THANKS**

**FOR YOUR ATTE**