



Extending the Use of Administrative Data in the Production of Business Statistics

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I. Motives for Change and Challenges

Reasons for Need for Change



Response burden



Difficulties in direct collection from respondents



Increasing costs



Developments in technology



Constantly growing data size and increasing demand for data



Difficulties in measuring economy through primary data sources



Measurement errors



Good practices in other national statistical offices

Challenges of Adapting Big Administrative Data into the Statistical System

- **Uncertainty (Technical and Methodological)**
- **Data Storage**
- **Lack of Metadata**
- **New Employee Profile**
- **Organizational Culture**

The background of the slide features a blue-toned image of two hands holding two puzzle pieces. The puzzle pieces are designed with a complex circuit or PCB pattern. The background is filled with faint, glowing digital elements like binary code (0s and 1s) and various geometric shapes, creating a high-tech, data-oriented atmosphere.

II. Integrated Administrative Sources

Administrative Data Sources Integrated into the System

- Revenue Administration

- Social Security Institution

Main Data Sources Used in Business Statistics

Period	Tax Records	Social Security Records
Annual	Corporate and Income Tax Returns and supplements (balance sheets, income statements etc.)	Data on the insurance holders who are working <ul style="list-style-type: none"> - under service contract - on their own accounts - as civil servants
Quarterly	Provisional Tax Return and Supplements	
Monthly	VAT, SCT, Withholding Tax Return; Buying and Selling Statements	

A conceptual image showing several hands reaching in from the edges of the frame, holding and interlocking a set of black gears. The background is a light blue gradient. The gears are of different sizes and are meshed together, symbolizing integration and teamwork.

III. Management of Integration Process of Administrative Sources

Adaptation of Staff to New Situation and New Skills Acquired

- Data processing habits changed

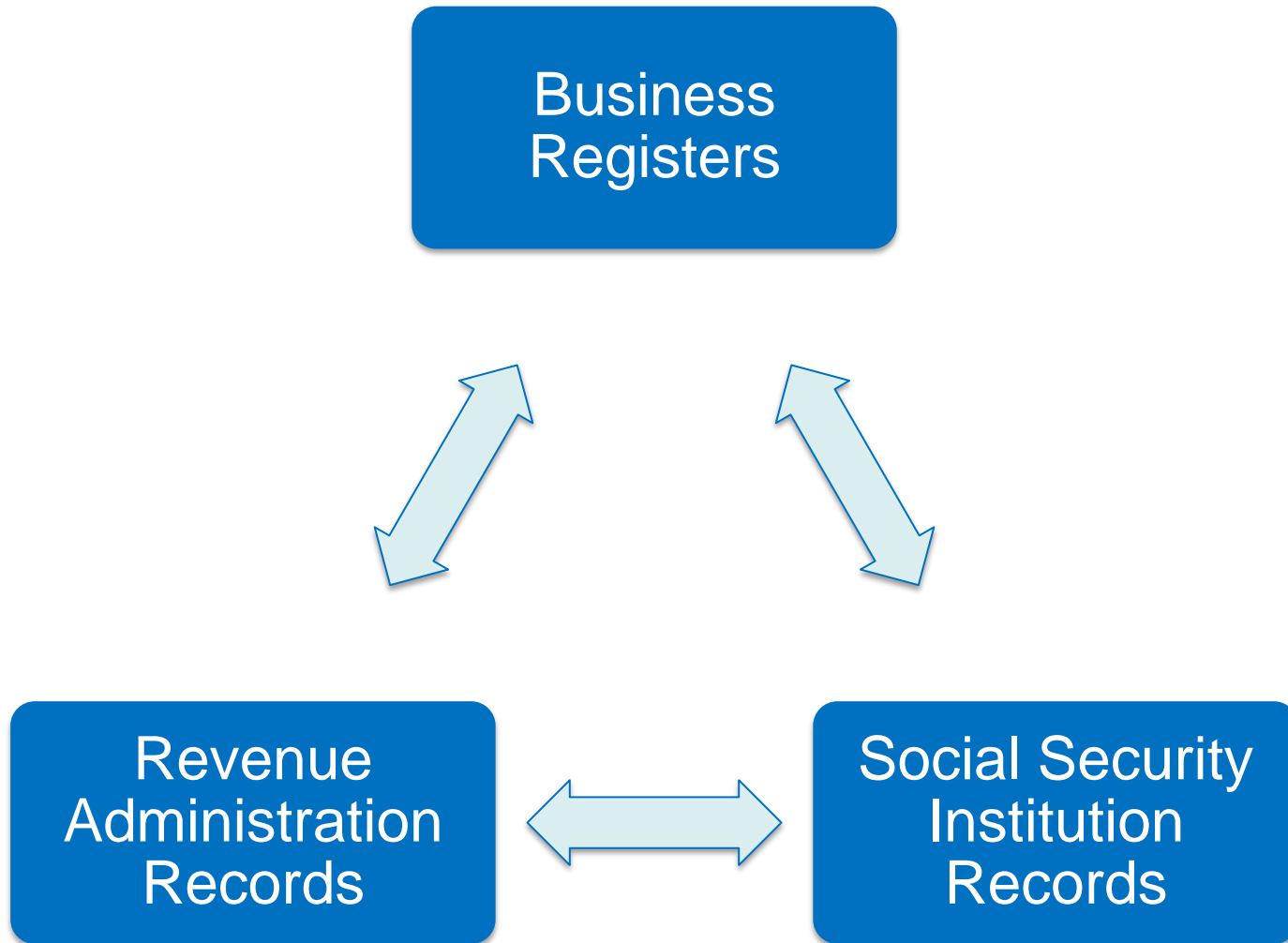
- Process of learning and adaptation of new tools started immediately such as

- Trainings
- Working together (collaborative works between units)

- Database performance tuning and query optimization became an important issue such as;

- Working with table views
- Indexing/partitioning

Link to Business Registers



Acquisition of Administrative Data

**Data Transfer
from
Administrative
Source to
TURKSTAT**

**Structure and
Integrity Checks**

**Anonymization,
Classification
and Coding**

**Authorization
of Subject
Matter Units
for Data
Processing**

Processing of Administrative Data

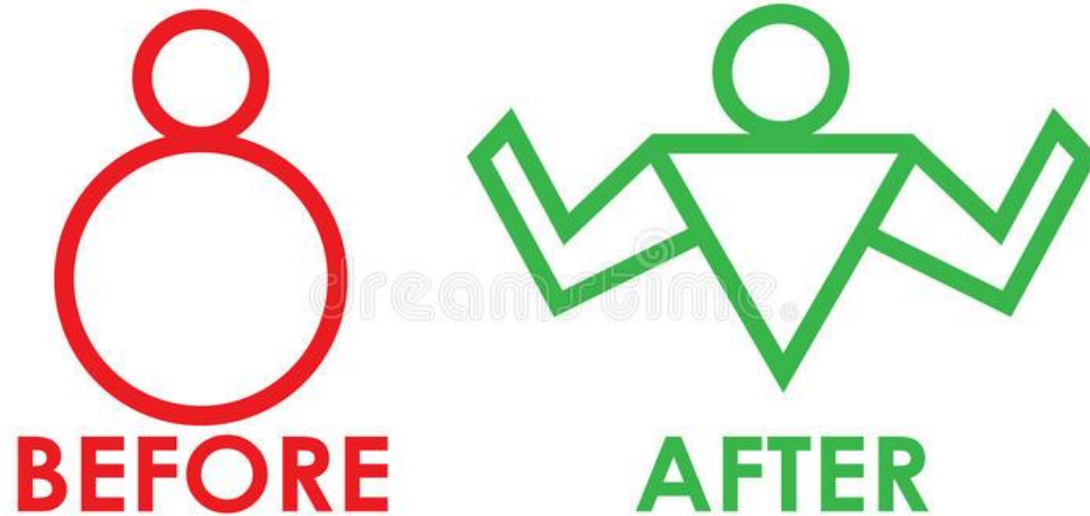


**Data
Integration**

**Editing and
Checking
for Internal
Consistency**

Imputation

**Corporate
Data**



IV. Redesign of Business Statistics

Domains Affected Most By the Process of Extending the Use of Administrative Data

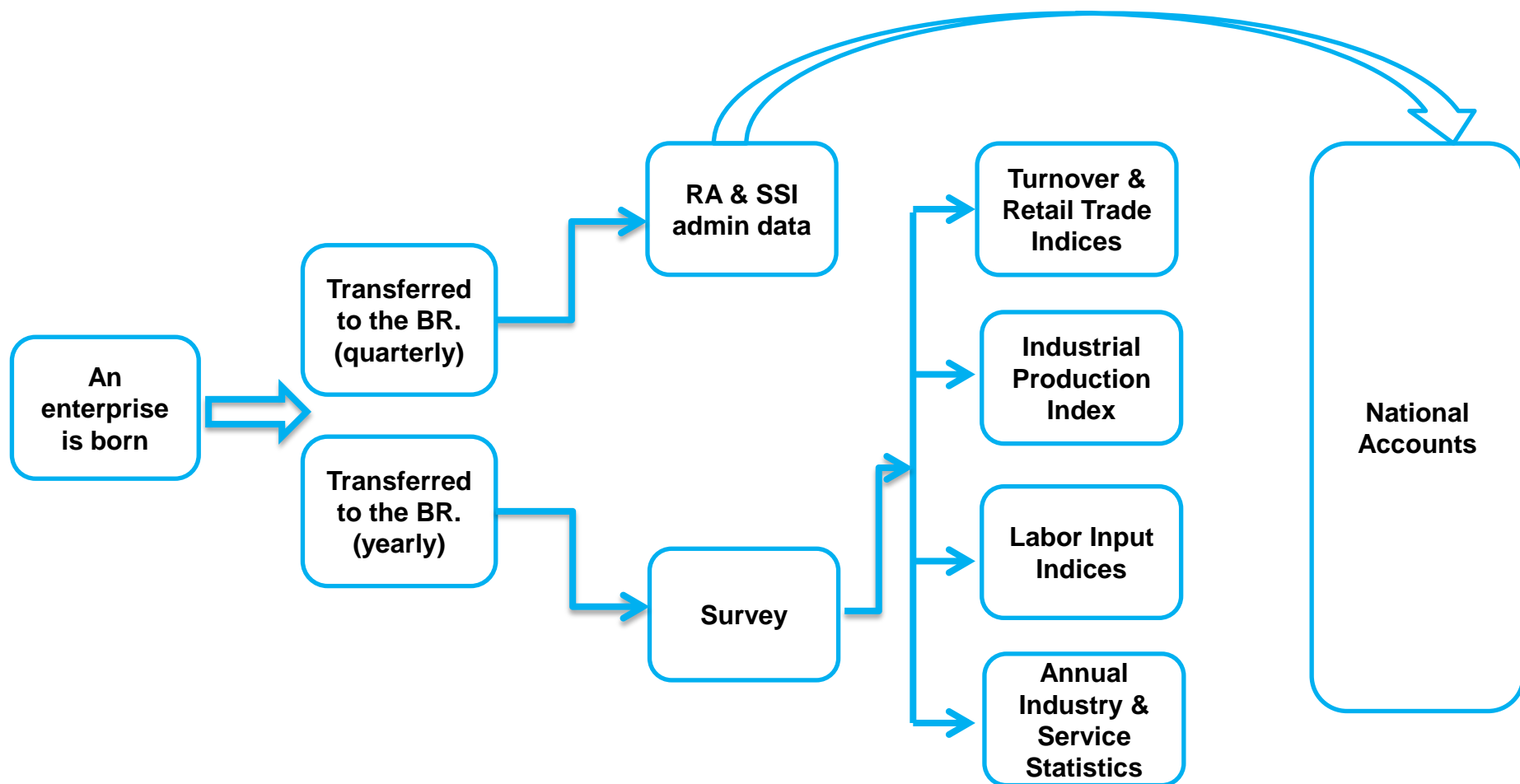
- Business Registers

- Short-Term Business Statistics

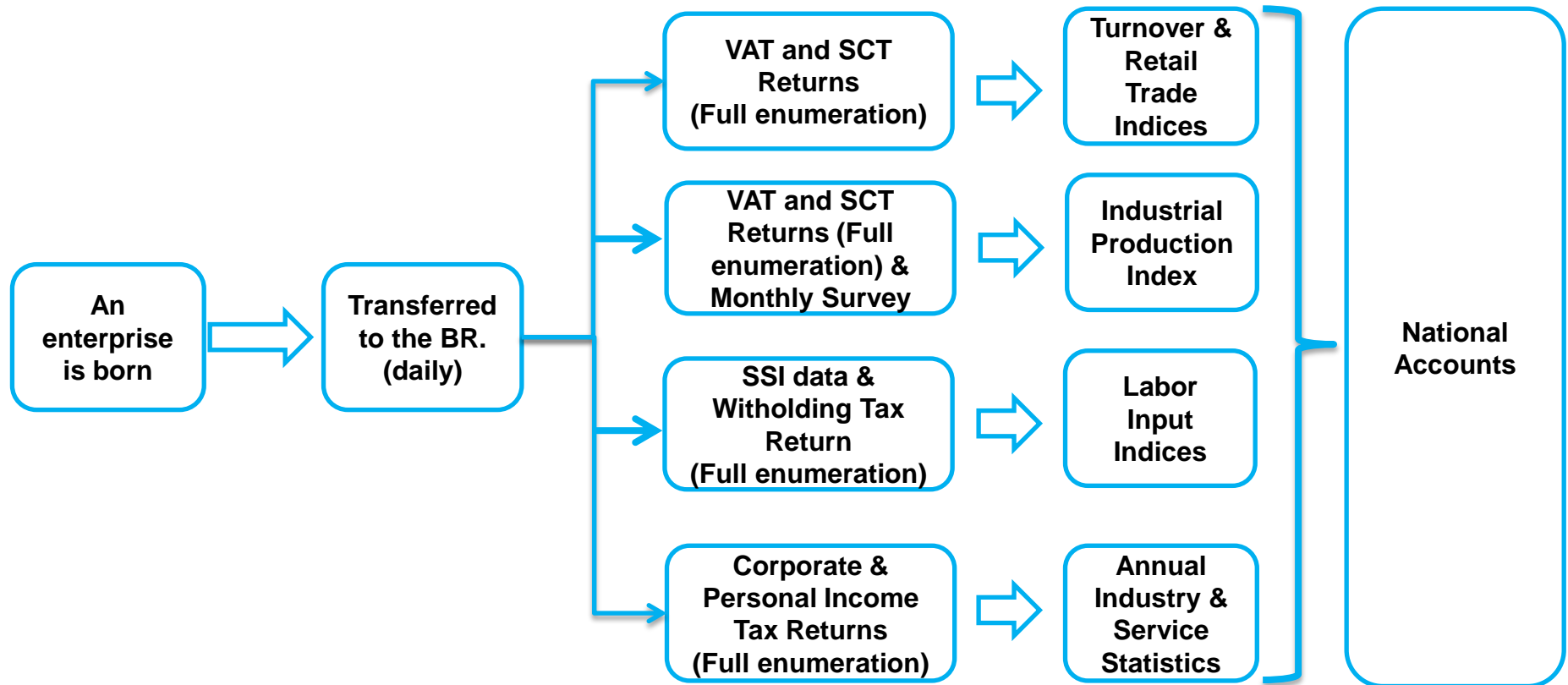
- Annual Business Statistics

- National Accounts

Before Change in Business Statistics



After Change in Business Statistics



V. Conclusions and Discussion

Use of Administrative Data in Statistical Production Contributes to:

- Reduce cost and reporting burden of businesses
- Improve data quality
- Development of the institutional culture in a positive way
- Improve internal cooperation & coordination between units
- Add new skills and mindset to the staff
- Establish strategic partnerships with admin data holders

Discussion Questions

I

The existing administrative registers in data provider institutions are established for the purposes other than statistical production. Therefore, some differences occur in data regarding coverage, classifications, reference dates etc. In the meantime, we should continue our efforts to keep a sustainable cooperation with data providers in order to eliminate these issues by improving and upgrading administrative registers and to maintain continuity of data delivery. So what do you recommend about innovative ways to improve/build/sustain sound partnerships with administrative data owners.

II

What can we do more to reduce response burden while increasing (or at least maintaining) the level of data quality?

III

What new business statistics can we produce from administrative sources that we have not produced before?



THANK
YOU

bilal.kurban@tuik.gov.tr