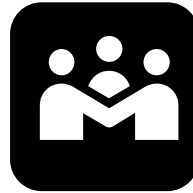


Data access, use and exchange at different maturity levels

Statistics Estonia – practice and considerations

Main challenges for the next decade

Strong data governance
Multiple-source data



Low administrative burden
Once-only principle



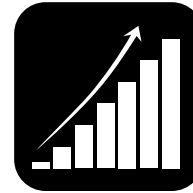
Real-time data mining
Quick decision-making



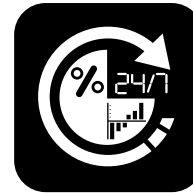
Globalisation and Big Data
More in-depth information



High quality of statistics
Indicators with metadata



User-friendly dissemination
Personalised information



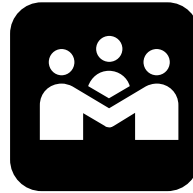
Real-time information
Faster and simpler information



Reliable information
Quality data for media

Main challenges based on our experience

Strong data governance
Multiple-source data



Currently less than 30% of data come from surveys; administrative data are used in more than 68% of statistical activities.

Low administrative burden
Once-only principle



Once-only principle is laid down by law in Estonia.

Real-time data mining
Quick decision-making



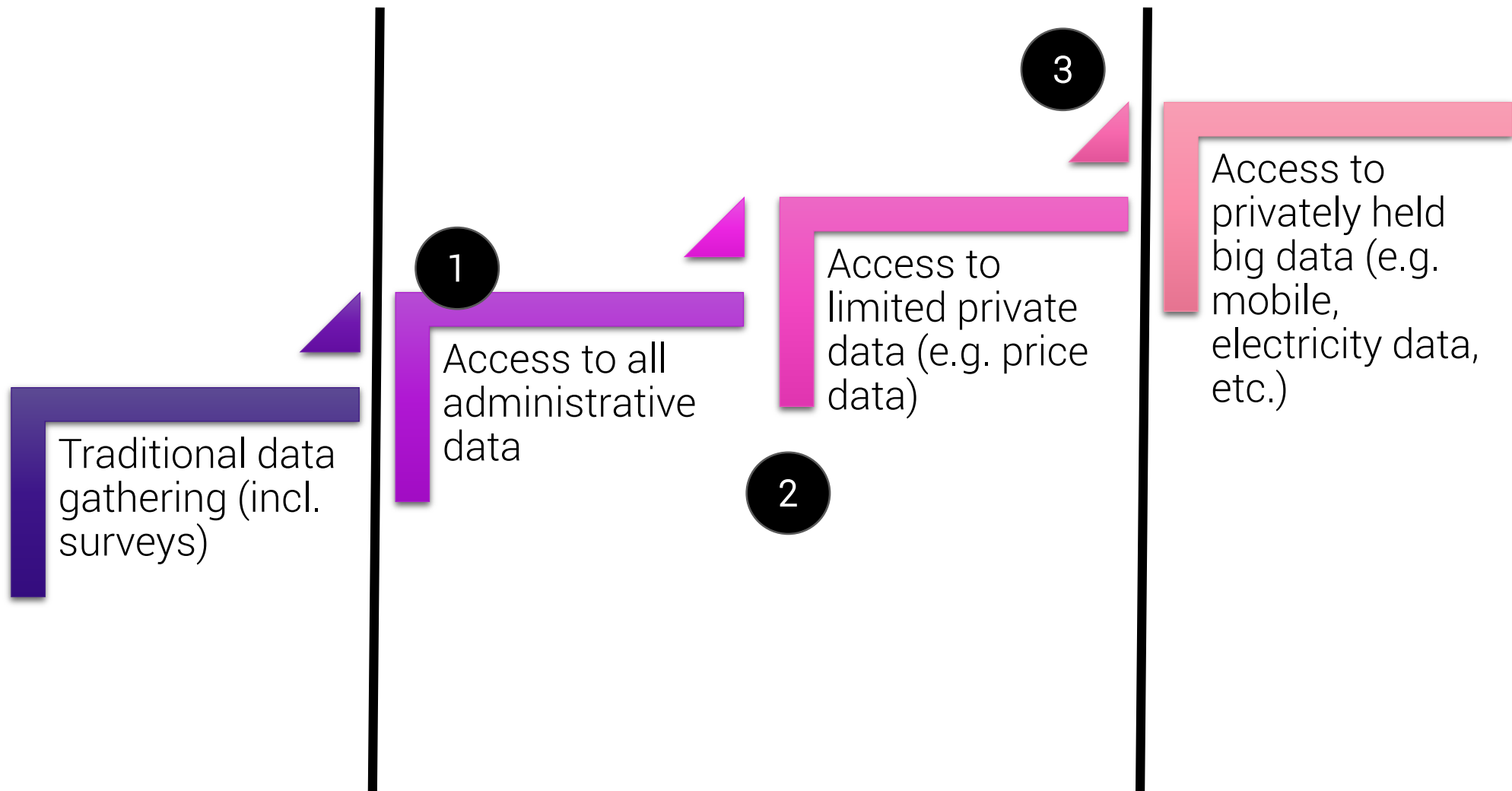
Extensive data governance becomes essential for finding, linking and quality of data.

Globalisation and Big Data
More in-depth information



Big data (mobile, electricity data) are part of official statistics.

Data access maturity levels: three considerations for legal access at medium levels



Consideration 1:

Obligation to use administrative data

Defined by the Official Statistics Act

- ... a producer of official statistics shall **primarily use data collected in administrative records** ..., if such data allow the production of official statistics complying with the quality criteria of official statistics. (OSA § 29(1))
- A producer of official statistics has the right to make proposals for amending the composition of data and the classifications used in the administrative records and databases ... (OSA § 29(2))
- A producer of official statistics has the right to link micro-data collected from respondents and administrative records and databases by using characteristics that allow direct or indirect identification of statistical units. (OSA § 30(3))

Supported by the Public Information Act

- Before the establishment of a database or changing the composition of the data collected in a database, introducing a database or terminating a database, the technical documentation of **the database shall be approved by** the Estonian Information System Authority, the Data Protection Inspectorate and **Statistics Estonia**. (§ 43³(3))
- Administration system for the state information system (RIHA) serves as a catalogue for the state's information system <https://www.ria.ee/administration-system-of-the-state-information-system>

Consideration 1 (example): State Information System management (RIHA)

RIIGI INFOSÜSTEEMI HALDUSSÜSTEEM

home page [RIHA Directory](#) RIHA Homes Help Center

Otsi

Information systems

Otsi kataloogist search

Refine your search

Found in 2206 information system

THE OWNER	SHORT NAME	INFORMATION SYSTEM NAME	STATUS	COORDINATION	KEYWORDS	
Saaremaa Rural Municipality Government	SOCIAL EDUCATION	Saaremaa Rural Education Register	when establishing	establishment of the coordinated	HOBBY EDUCATION PRE-SCHOOL EDUCATION GENERAL EDUCATION	20
Mikitamäe Rural Municipality Government	75024610-data-file services	Data Services Services	when establishing	not coordinated	X-ROAD SUBSYSTEM	20
Estonian Student Union Association	khs	My School card management system	when establishing	not coordinated	EDUCATION, TRAINING, YOUTH WORK	20

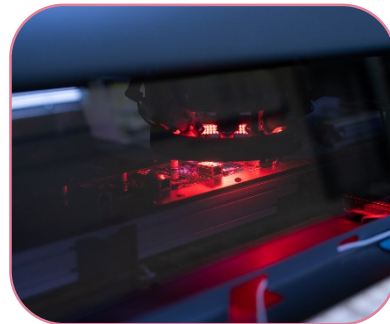
Consideration 2: Microdata sharing based on ontology

Project Reporting 3.0, which derives from the zero-bureaucracy initiative, is co-operation with business software developers and entrepreneurs to work out a technological solution for the movement of data from the respondents' accounts to data users.

Lowest-level data without any aggregation (will be on the public side) are transferred on voluntary basis via the X-Road which provides secure interoperability.



Voluntary



Based on XBRL
data exchange



Based on
taxonomy

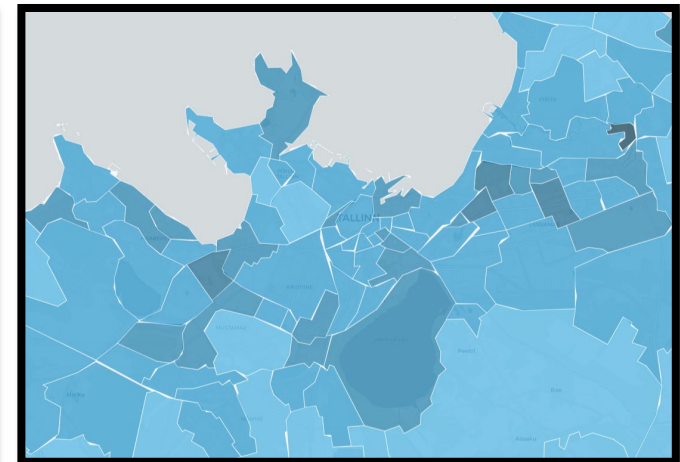
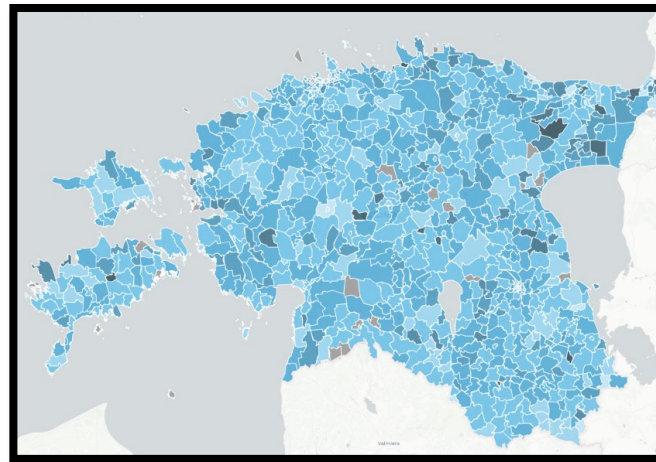


Personal income
data for Statistics
Estonia and
Estonian Tax and
Customs Board

Consideration 3: Co-operation with sensitive data holders

Estonia has developed mobility analysis based on mobile and geospatial data to follow up and support decision-making on the lock-down rules during the COVID-19 pandemic. Integrating such data is highly beneficial for sustainable development, disaster, tourism, migration, mobility, etc. statistics.

Due to extraordinary speed (14 days from need to dissemination), new methodology was created jointly by all operators, Positium and Statistics Estonia using privacy-by-design principles.



% of sedentary mobile phones (lighter is more sedentary), polygon level



Thank you!

Any questions?