



Metadata

Looking behind the numbers

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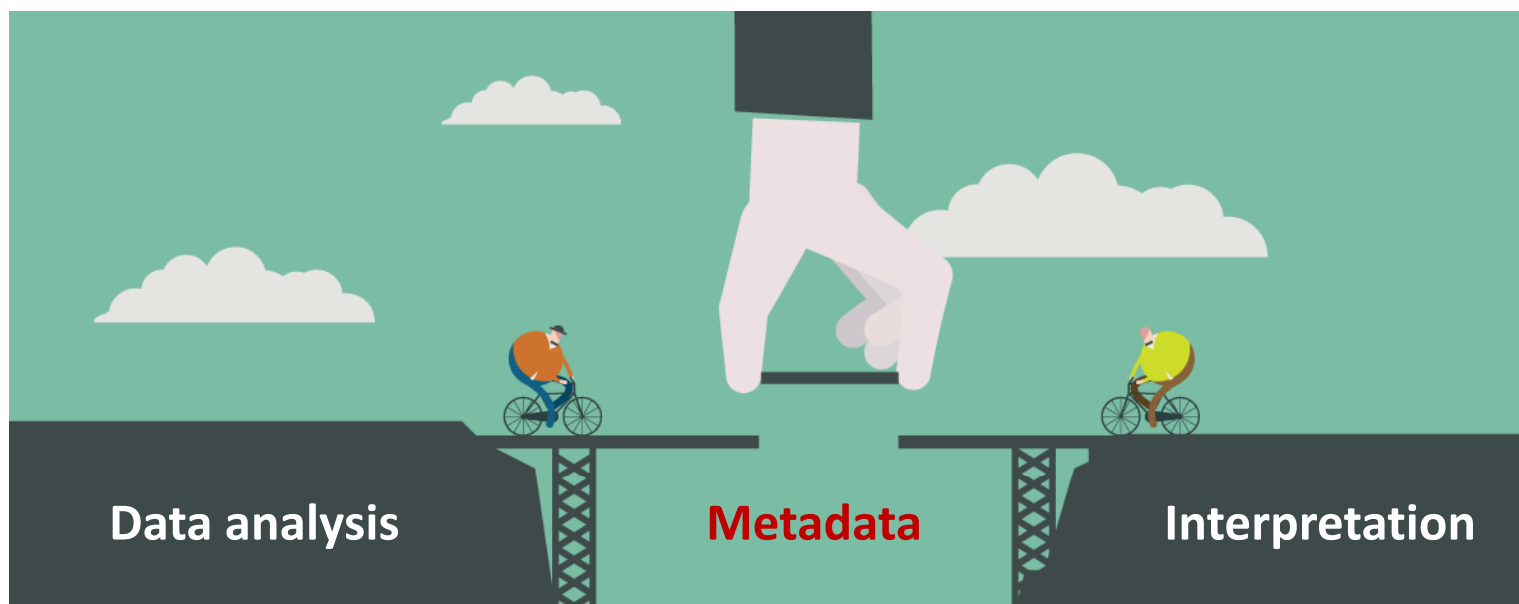
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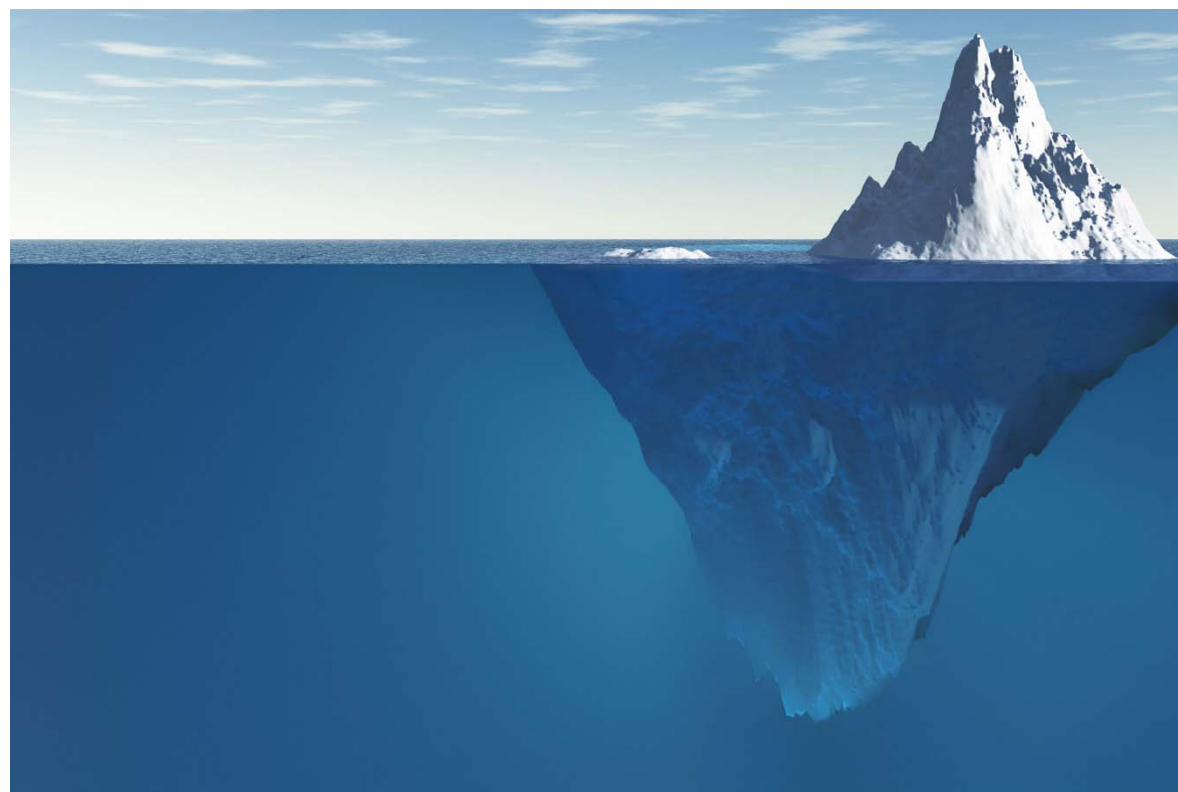
What we produce

- News Releases
- Publications
- Online Statistical database (Stat Db)
- Anonymised datasets available for research purposes
- Information requests
- Data transmissions to external organisations
- Enquiries carried out on behalf of third parties
- **Metadata**

“Data that define and describe other data”



What are metadata?



What are metadata?

Metadata

Maltese resident population by reference year and country of birth

		Year					
		2012	2013	2014	2015	2016	2017
Country of birth	Malta	n,nnn	n,nnn	n,nnn	n,nnn	n,nnn	n,nnn
	UK	n,nnn	n,nnn	n,nnn	n,nnn	n,nnn	n,nnn
	Australia	n,nnn	n,nnn	n,nnn	n,nnn	n,nnn	n,nnn
	Canada	n,nnn	n,nnn	n,nnn	n,nnn	n,nnn	n,nnn
	Other	n,nnn	n,nnn	n,nnn	n,nnn	n,nnn	n,nnn

Data

Source: Census of Population and Housing

Types of metadata

- **Reference metadata:**
 - describe the contents and quality of statistical data
- **Structural metadata:**
 - identify and describe the data
- **Process metadata:**
 - describe and define the set of business processes needed to produce the data

Perceptions

- **Accessibility** and **Clarity** are often considered to be the most neglected dimensions of quality
- Good data - normally hard to find and confidentiality issues hinder its use
- Interpreting statistical data - a cumbersome task which requires technical and analytical skills
- Reference Metadata:
 - Often written by specialists
 - Full of jargon
 - Too long, detailed ... boring!

**“Every statistical product
(be it data or metadata)
must suit its user(s) to be truly
effective”**



Types of users: Tourists



- Level of knowledge:
 - Basic users - not experts in Statistics
- Expectations:
 - Basic data, simple interfaces and easy to understand metadata
- Propensity:
 - Most users are likely to be tourists

Types of users: Harvesters

- Level of knowledge:
 - Fair statistical knowledge
- Expectations:
 - Data for basic research or economic decisions, with summary metadata to help them understand data quality
- Propensity:
 - A good number of users

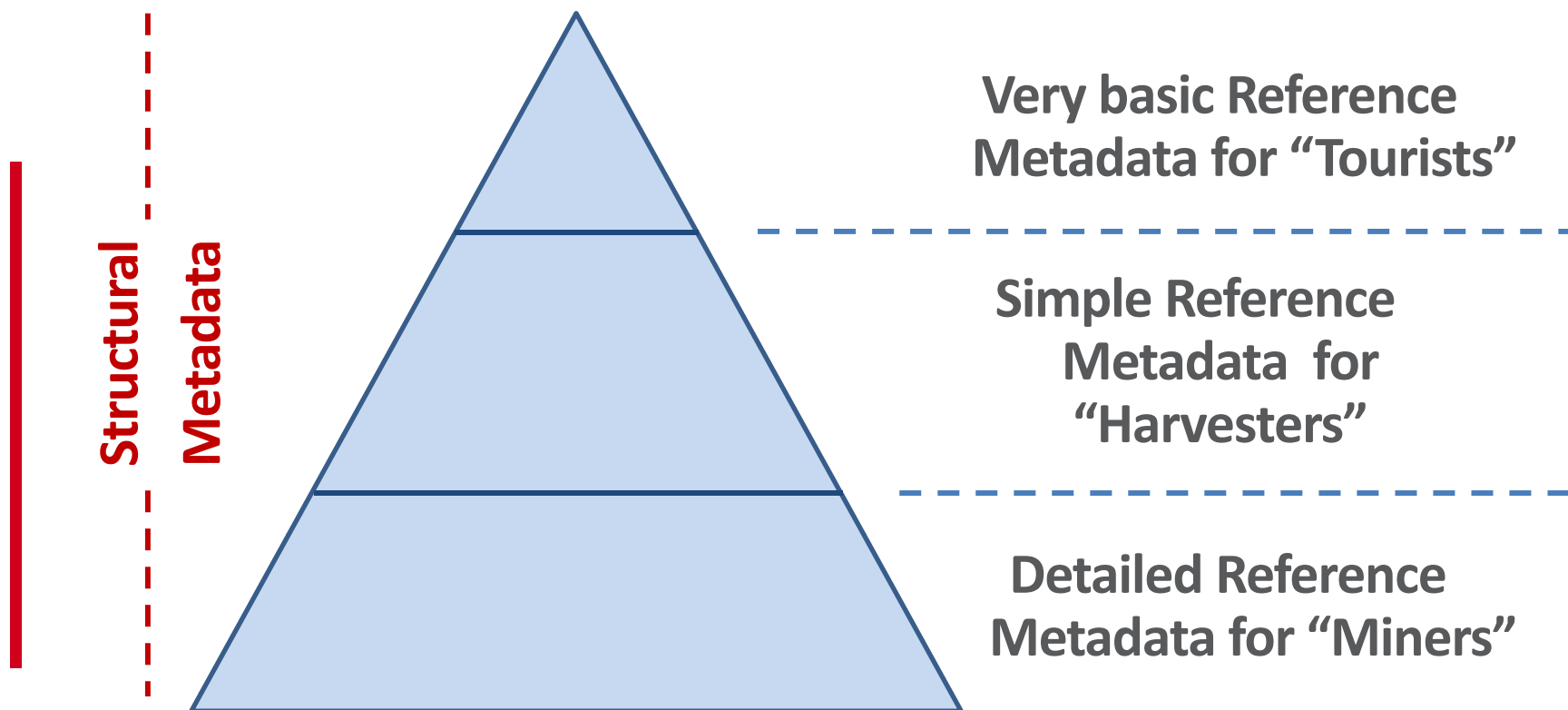


Types of users: Miners

- Level of knowledge:
 - Technical people with strong statistical knowledge
- Expectations:
 - Detailed data for further analysis (normally micro data) and very detailed metadata so that they can understand the data well
- Propensity:
 - A small minority of users



Layers of metadata



Source: UNECE

What makes 'good' metadata?

- One that is written keeping in mind the users of statistics rather than the producers
- Consistency with other national and international standards for concepts and definitions
- One which has clear links to and from the data



Modern use of statistical data

- Multi-source data analyses: nowadays
 - Metadata has become crucial
- Different interfaces and data classifications
 - A major source of irritation to users
- Standardisation
 - Improves accessibility for the statistical community as a whole

How can technical issues be explained in a practical and effective way to experts and laypeople?



Using metadata effectively

- Bringing data to users in an understandable way
- Irrespective of the user group you belong to, there is the right metadata for you!
 - Concepts and definitions
 - Sources and methods
 - Quality reports
 - Processes
 - Dedicated website

Targets ahead

- Quality management at the NSO
- Theories and Practice
- Revamped dissemination portal
- A more comprehensive metadata portfolio

**THANK YOU FOR YOUR
ATTENTION**

