



# An update on recording of Data as capital formation

Group of Experts on National Accounts 2021, 18 May, 2021  
John Mitchell



## Data as an asset

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- **Preliminary guidance note in 2020** – presented at UNECE webinars last year.
  - Generated **agreement on several key issues** (Data can be an asset, it is distinct from the “OPs” that underpin it).
- **Updated issues paper presented to AEG in April 2021**, provided options for several areas:
  - **What costs** associated with “acquiring” data **should be included** in the valuation of the data asset.
  - The **exclusion of OPs** from the SNA asset boundary.
  - If any component of the data asset should be **considered non-produced**.



## Guiding principles for the recording of Data

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- Currently there is **no final recommendations on a preferred treatment**, however, there is support for certain principles:
  - A preference for **a “prudent” estimation methodology** for any produced data asset, **no significant or open-ended changes to GFCF and GDP**.
  - A preference for **no extension of the production boundary**, when it comes to the emergence of OPs, especially **within the household sector**.
  - A preference for a **practically feasible methodology**, when it comes to implementation.



# Definition of Data

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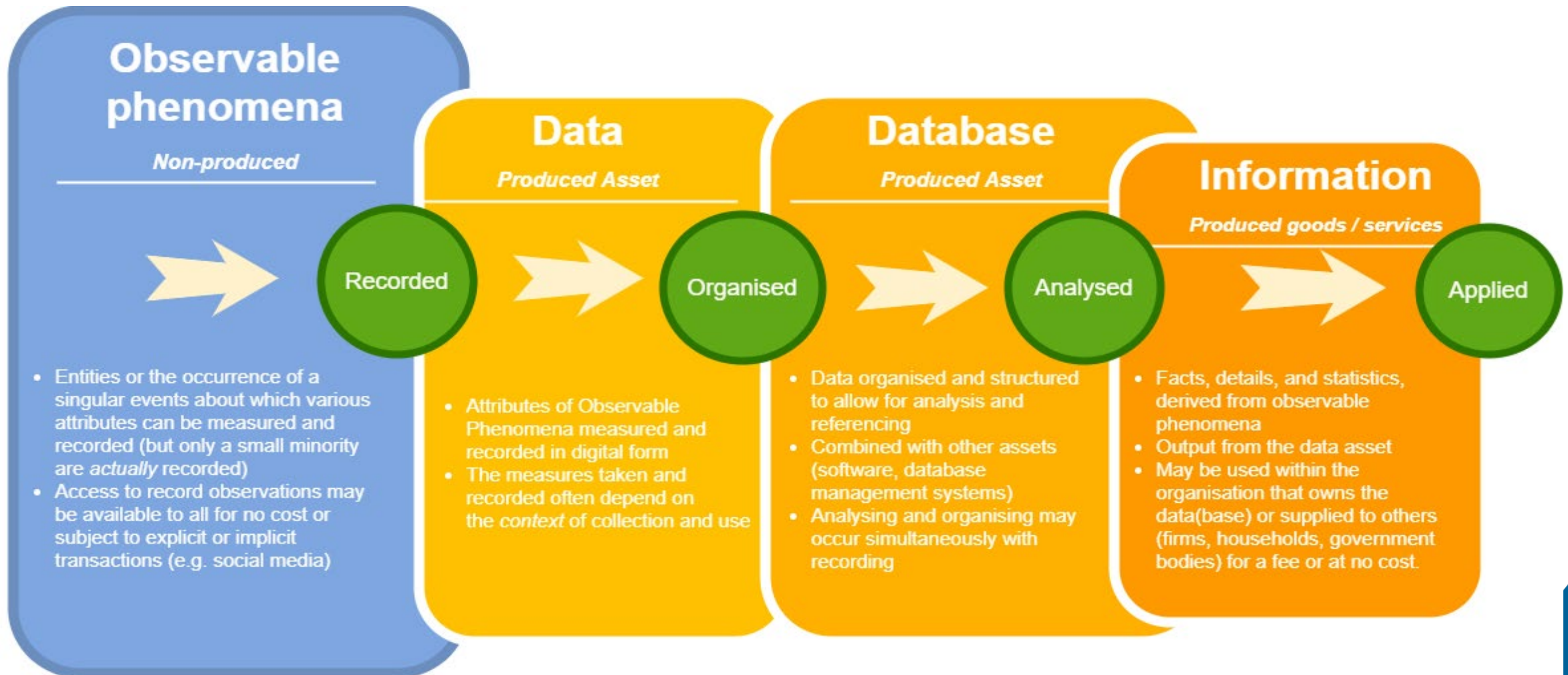
## Current working definition for measurement

“Data is information content that is produced by **accessing** and **observing** phenomena; and **recording, organizing** and **storing** information elements from these phenomena in a digital format, which can be accessed electronically for reference or processing”

- **Everyone creates phenomena (people, economic units, nature)**
  - Not considered production in the national accounts, now or in the future.
- **Some units produce data from this phenomena**
  - Not considered production now, but likely in the future



# The OP – Data pathway





## How to value data

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- Very **limited information on market price** of data or the value of accessing OPs.
- **Sum-of-cost seen as most likely** valuation method (already in use for R & D and other IPP)
- **Preliminary sum-of-cost work** using specific occupations and other intermediate costs to value data assets **already exists** (Canada, USA and others)
- **Conceptually, what costs should be included?**



# WHAT COSTS TO INCLUDE



# Delineating costs of producing data

*“Data is information content that is produced by **accessing & observing phenomena** and **recording, organizing and storing** information elements from these observable phenomena in a digital format, which can be accessed electronically for **reference or processing**”*

- **Recording and processing costs**

- appears consensus that these should be considered as an act of production.

- **OP procurement costs**

- Current SNA explicitly states to **exclude** “the cost of acquiring or producing the data”.

- The previous TT GN stated that the value of own account data should **include** “the costs of collecting or acquiring observable phenomena”.

- How do firms access the phenomena?

- What does access costs actually mean?

- Which is right choice?





## Obtaining access to OP

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Three basic ways in which firms acquire (access to) OPs:

- **In exchange for free services; (lots of access costs)**
  - Social media, free phone apps
- **By explicitly purchasing them; (some access costs)**
  - Coinout, Amazon, consumer research
- **As a by-product of the primary production process. (minimal or even no access costs)**
  - Retail, financial services, logistics (this may include additional recording devices inserted on finished products)



## OP procurement costs (Additional considerations)

- Are all OP procurement costs created equal?

**Level of production and/or resources required**

OP costs non existent, a by-product of conventional production. Does this make the data asset less valuable?

OPs are purchased, minimal or no labor and capital involved, it is a simple transaction

OPs accessed due to creation of new platforms, this involves complex research, as well as significant labor and capital required as input

Value of data asset potentially unrelated to the level of production associated with gaining access.



# OP procurement costs

(Additional considerations)

- The OP procurement costs **often have a second benefit**, on top of the access they provide.

## Example

- Is the main point of social media assets to:
  - **produce data**
  - **produce advertising**



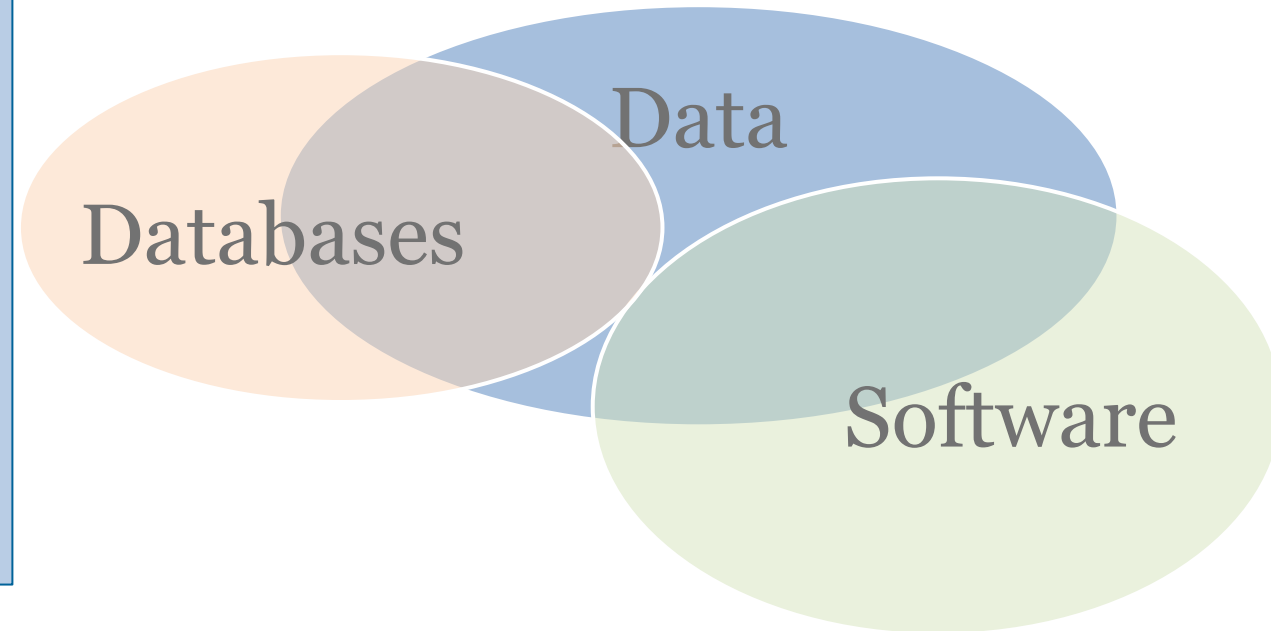


# OP procurement costs

(Additional considerations)

Many of the costs are likely already captured in other assets.

- R & D,
- Software
- Databases



**How to separate?**  
**Which asset takes “priority”?**



## What costs to include?

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- Is it **easier to leave OP procurement costs out?**
- If we do so, are we ignoring **where the value comes from?**

*“access to capital is no longer the biggest problem for startups. It is access to data.”*

- These costs are likely to **become more fundamental** to the creation of a data asset.



# Remaining points for resolution

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As well as which costs to include, there remains additional considerations before any final guidance can take place.

- **How is data sold?**
  - Provision of a service, sale of an asset, license
- **Is data entirely a produced asset?**
  - Could the expenditure on OP procurement be considered a proxy amount for a non-produced component of the data asset
- **Confirmation of production and consumption of short-lived data.**
  - Not all data is used for more than one year
- **Explicit transactions in OP?**
  - Are these a purchase of asset/rent payment/other?



# Thanks

[John.Mitchell@oecd.org](mailto:John.Mitchell@oecd.org)