

Data 4 Policy Why Quantification Matters in Modern Society



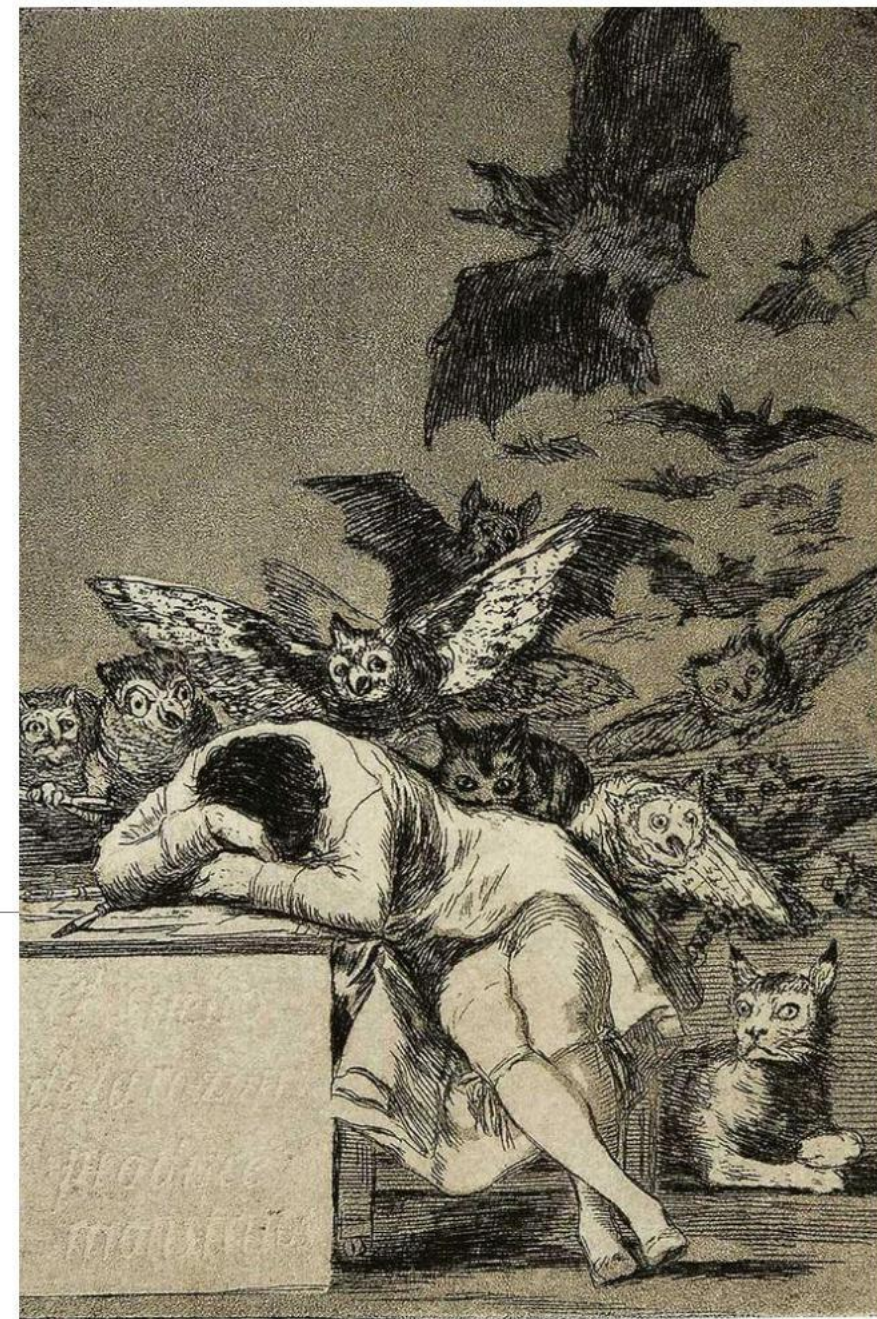
BERD
@NFDI



Threats

US FEDERAL STATISTICS AND MORE

<https://museogoya.fundacionibercaja.es/en/obras/the-sleep-of-reason-produces-monsters>



News & BlogPosts -Early January 2026



Interview: Warum liberale Ordnungen sich selbst schwächen

lmu.de

<https://doi.org/10.1080/13501763.2025.2580519>



https://www.linkedin.com/posts/mirkolange_diedrift-machtvorrecht-kulturkampf-activity-7415302384580509697-RRla?utm_source=share&utm_medium=member_desktop&rcm=ACoAABa-g44B69Plc4H-20rRu3hQuwG8zVA7GwI

America's Statistical System Is Breaking Down

Canceled surveys, missing datasets and staffing cuts are leaving the US with growing blind spots – and weakening trust in official numbers.



Illustration: Joonho B Ko for Bloomberg

<https://www.bloomberg.com/news/articles/2026-01-09/why-the-trump-administration-is-choosing-not-to-collect-some-us-data>

Assessing the Health of the
Federal Statistical Agencies

The Nation's Data at a Crossroads

Year Two Status Report

July 31, 2025; amended September 3, 2025*

American Statistical Association's Monitoring Framework: Six Critical Risk Areas for Federal Statistics

1. Cuts to Statistical Programs Programs
2. Delays or Reductions in Data Products
3. Budget and Staffing Reductions
4. Undermining Leadership and Staff Delays in appointments or unfilled leadership roles
5. Misuse of Data for Nonstatistical Purposes Other Emerging Threats

<https://www.amstat.org/docs/default-source/amstat-documents/nations-data-at-crossroads.pdf>

WALTER J. RADERMACHER

Price Index



Tension over inflationary data casts shadow over Argentine financial market

By Jorge Otaola

February 3, 2026 6:42 PM GMT+1 - Updated February 3, 2026



A drone view shows the facade of the Buenos Aires Stock Exchange, in Buenos Aires, Argentina December 18, 2024. REUTERS/Francisco Loureiro Purchase Licensing Rights

<https://www.reuters.com/world/americas/tension-over-inflationary-data-casts-shadow-over-argentine-financial-market-2026-02-03/>



António Guterres  · Following
Secretary-General of the United Nations
2d · 

GDP tells us the cost of everything, and the value of nothing.

The Gross Domestic Product (GDP) is failing to sufficiently address the environmental and social concerns of our world.

Our economic models and measurements overlook many aspects that sustain life and contribute to human well-being, while placing disproportionate value on activities that deplete the planet:

When we destroy a forest, we are creating GDP.
When we overfish, we are creating GDP.

We must place true value on the environment and go beyond GDP as a measure of human progress and well-being – now and in the future.

https://www.linkedin.com/posts/antonio-guterres_gdp-tells-us-the-cost-of-everything-and-activity-7426979142170001408-tqve?utm_source=share&utm_medium=member_desktop&rcm=ACoAABa-g44B69Plc4H-20rRu3hQuwG8zVA7GwI

...

“

We must place true value on the environment and go beyond GDP as a measure of human progress and well-being.



Andrea Saltelli



Give me a number!

“The pandemic has also shown that the act of quantifying, either by a model or by an algorithm, increasingly nourishes the science–policy interface with the opportunity to outsource decision-making authority to number-based decision-making , when momentous political decisions are delegated to the purported neutrality of model generated numbers.”

<https://www.nature.com/articles/s41599-020-00557-0>

Sociology of Quantification

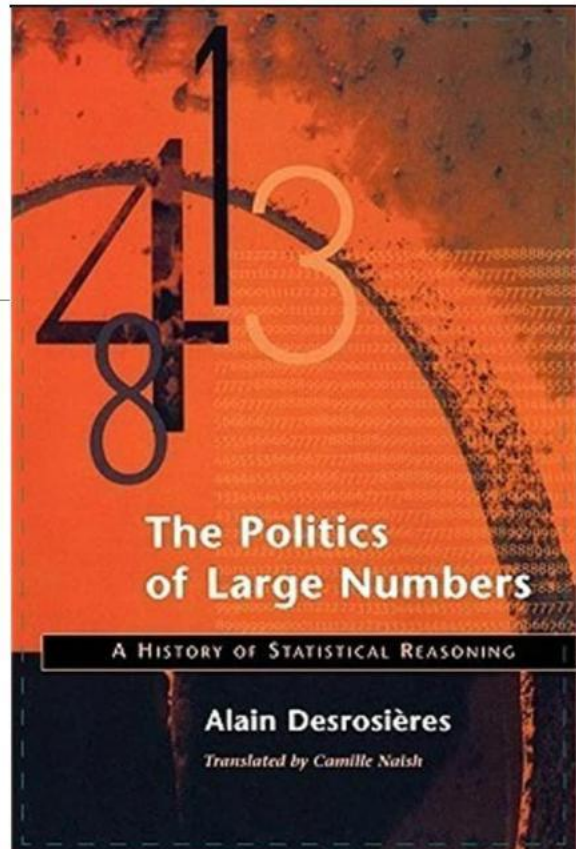
WHY QUANTIFICATION MATTERS IN MODERN SOCIETY

2. How is this person related to the person in column 1? <i>Fill one circle.</i> If "Other relative" of person in column 1, give exact relationship, such as mother-in-law, niece, grandson, etc.	<i>START in this column with the household member (or one of the members) in whose name the home is owned or rented. If there is no such person, start in this column with any adult household member.</i>	If relative of person in column 1: Husband/wife Son/daughter Brother/sister If not related to person in column 1: Roomer, boarder Partner, roommate Paid employee
3. Sex <i>Fill one circle.</i>	Male <input type="checkbox"/> Female <input type="checkbox"/>	Male <input type="checkbox"/> Female <input type="checkbox"/>
4. Is this person — <i>Fill one circle.</i>	White Black or Negro Japanese Chinese Filipino Korean Vietnamese Indian (Amer.) Other — Specify	Black or Negro Japanese Chinese Korean Vietnamese Indian (Amer.) Other — Specify
5. Age, and month and year of birth <i>a. Print age at last birthday.</i> <i>b. Print month and fill one circle.</i> <i>c. Print year in the spaces, and fill one circle below each number.</i>	a. Age at last birthday 1 8 0 0 2 9 1 1 3 2 2 2 4 3 3 3 5 4 4 4 6 5 5 5 7 6 6 6 8 7 7 7 9 8 8 8 0 9 9 9	a. Age at last birthday 1 8 0 0 2 9 1 1 3 2 2 2 4 3 3 3 5 4 4 4 6 5 5 5 7 6 6 6 8 7 7 7 9 8 8 8 0 9 9 9
6. Marital status <i>Fill one circle.</i>	Never married Now married Widowed Divorced	Never married Now married Widowed Divorced
7. Is this person of Spanish/Hispanic origin or descent? <i>Fill one circle.</i>	No (not Spanish/Hispanic) Yes, Mexican, Mexican Amer., Chicano Yes, Puerto Rican Yes, Cuban Yes, other Spanish/Hispanic	No (not Spanish/Hispanic) Yes, Mexican, Mexican Amer., Chicano Yes, Puerto Rican Yes, Cuban Yes, other Spanish/Hispanic
8. Since February 1, 1980, has this person attended regular school or college at any time? <i>Fill one circle.</i> <i>Count nursery school, kindergarten, elementary school, and schooling which leads to a high school diploma or college degree.</i>	No, has not attended since February 1. Yes, public school, public college Yes, private, church-related Yes, private, not church-related	No, has not attended since February 1. Yes, public school, public college Yes, private, church-related Yes, private, not church-related
9. What is the highest grade (or year) of regular school this person has ever attended? <i>Fill one circle.</i> <i>If now attending school, mark grade person is in. If high school was finished by equivalency test (GED), mark "12."</i>	Highest grade attended: Nursery school Elementary through high school (grade or year) 1 2 3 4 5 6 7 8 9 10 11 12 College (academic year) 1 2 3 4 5 6 7 8 or more Never attended school — Skip question 10	Highest grade attended: Nursery school Elementary through high school 1 2 3 4 5 6 7 8 College (academic year) 1 2 3 4 5 6 7 8 or more Never attended school — Skip question 10
10. Did this person finish the highest grade (or year) attended?	Now attending this grade (or year) Finished this grade (or year) Did not finish this grade (or year)	Now attending this grade (or year) Finished this grade (or year) Did not finish this grade (or year)

The Politics of Numbers
William Alonso
Paul Starr
editors

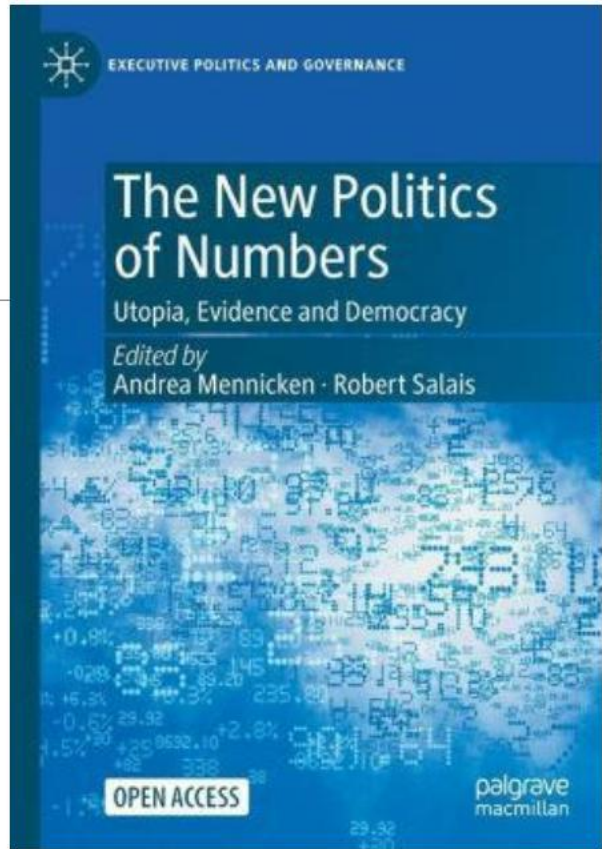
1987

Alonso, W., and P. Starr. 1987. *The Politics of Numbers* (Russell Sage Foundation).



1998

Desrosières, Alain. 1998. *The Politics of Large Numbers - A History of Statistical Reasoning* (Harvard University Press: Cambridge Massachusetts).



2022

Mennicken, Andrea, and Robert Salais. 2022. *The New Politics of Numbers: Utopia, Evidence and Democracy* (Palgrave Macmillan: Cham).

Alain Desrosières



Quantification is

- not merely a technical process,
- but also a social phenomenon that influences how we perceive and organise the world.
- It involves producing and communicating numbers, converting qualities into quantities, and creating new social realities.

Historical context

- The emergence of modern statistics in the 17th–19th centuries (e.g. censuses, economic data)
- Statistics was/is connected to state formation, administration and scientific objectivity.

Key terms:

- Conventions: Quantification is based on social agreements (e.g. the definition of poverty or unemployment).
- Power: Who defines what is measured? (Example: GDP as an indicator of prosperity).
- Objectivity as an illusion: Numbers appear neutral, but they are the result of social processes.

Espeland and Stevens A Sociology of Quantification

<http://www.jstor.org/stable/23998802>

As with language, purposes and meanings of quantification are established through use.

Five sociological dimensions

Work: Quantification requires significant labour, infrastructure and coordination (e.g. bureaucracies and standardised methods).

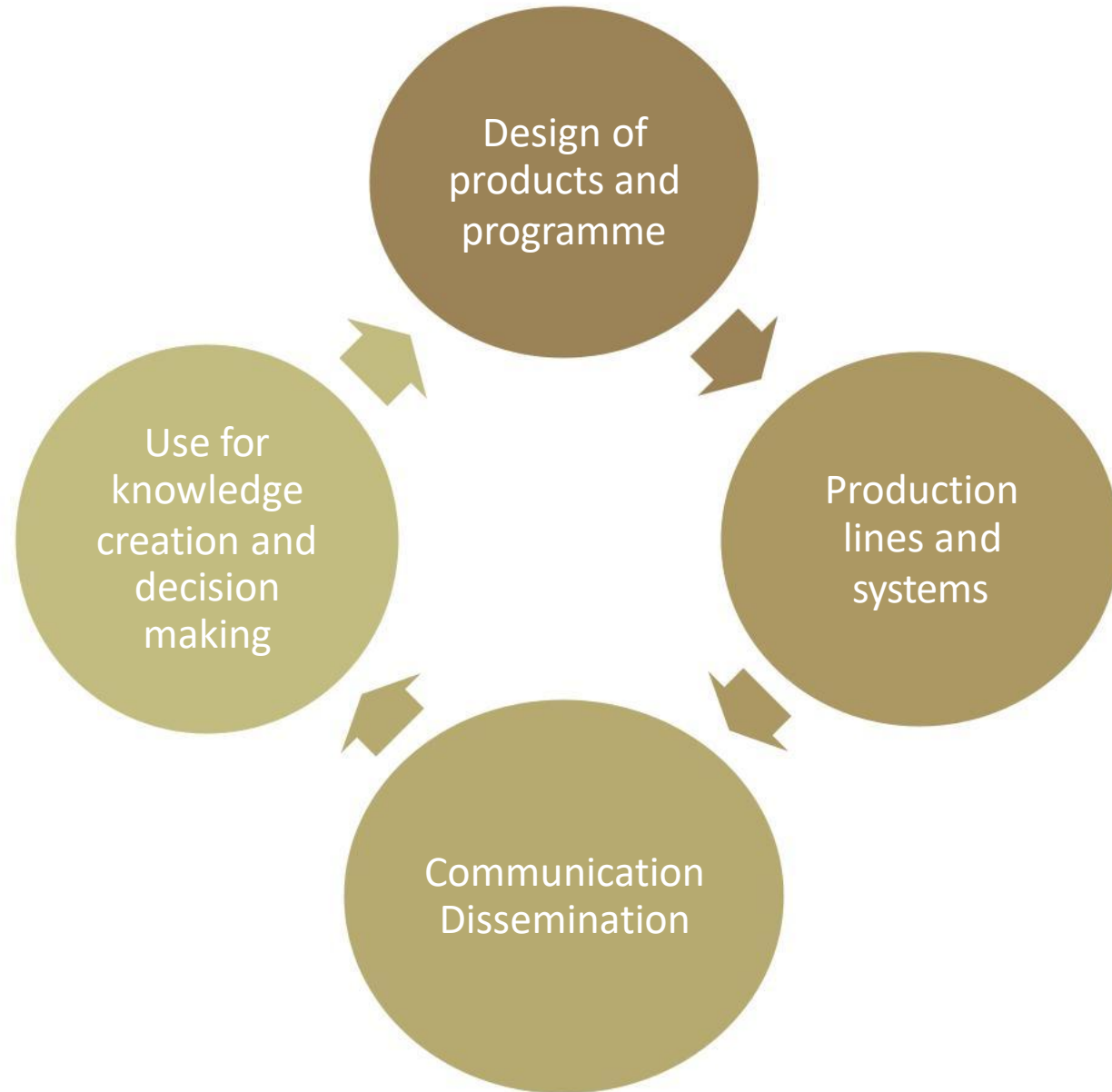
Reactivity: Numbers change what they measure. For example, test scores shape education systems and rankings alter institutional behaviour.

Discipline: Quantification enables surveillance and control, often reinforcing norms and hierarchies (e.g. performance metrics in workplaces).

Authority: Numbers can be persuasive due to their perceived accuracy, usefulness or objectivity, but their authority ultimately depends on social trust and institutional power.

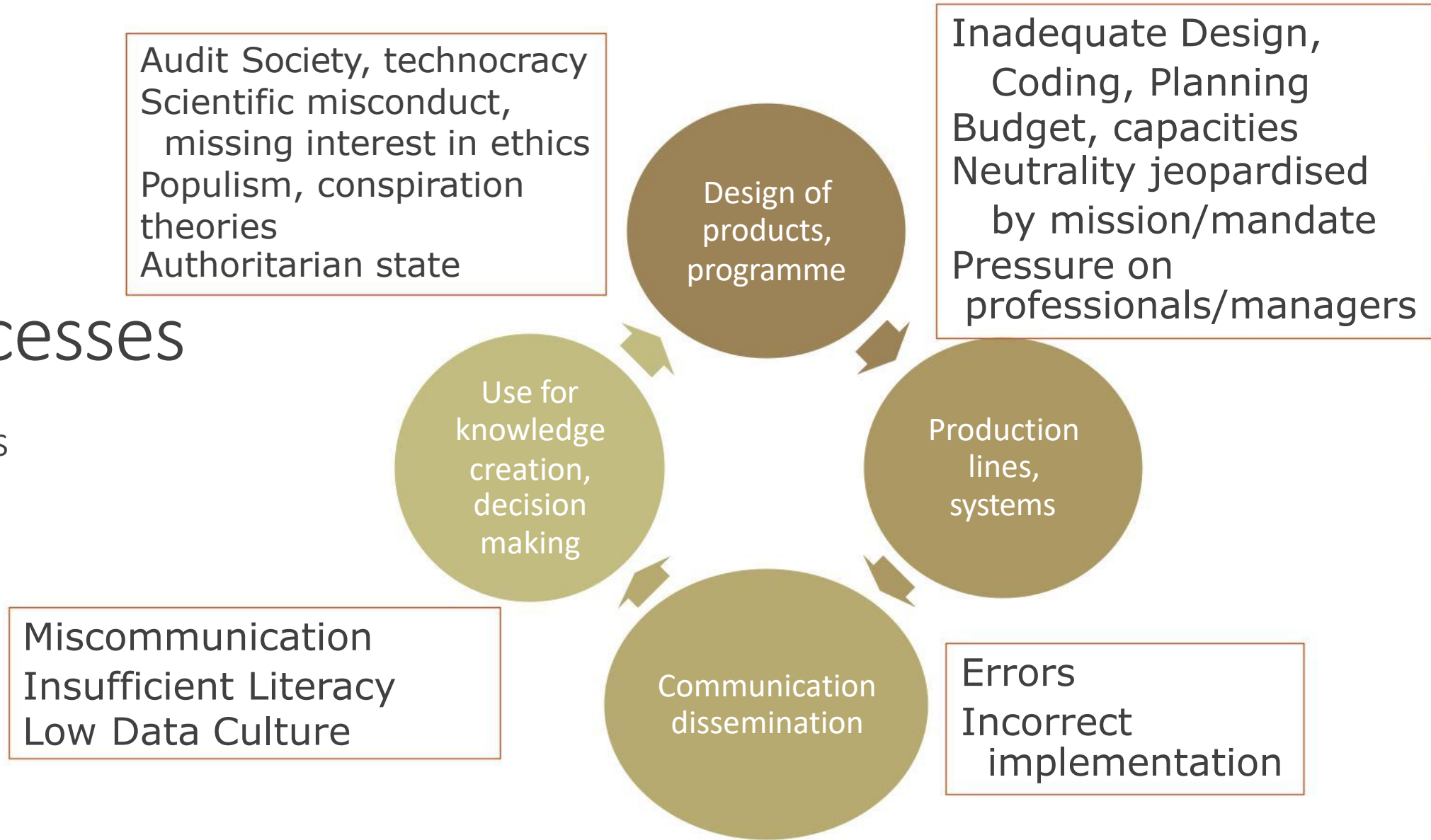
Aesthetics: The clarity and elegance of numerical representations (e.g. graphs and charts) influence their credibility and impact.

Factory Statistics: Main Processes



Statistics: Main Processes

Traps, weaknesses



Which reality should be quantified?

THE “WHAT” TODAY, TOMORROW AND THE DAY AFTER TOMORROW

FIGURE 3

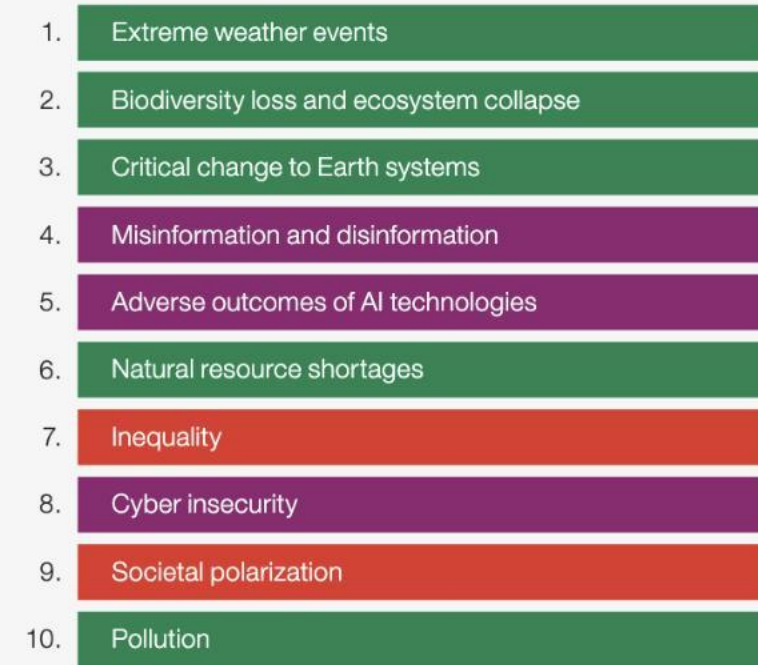
Global risks ranked by severity, short term (2 years) and long term (10 years)

"Please estimate the likely impact (severity) of the following risks over a 2-year and 10-year period."

Short term (2 years)



Long term (10 years)



Source

World Economic Forum Global Risks Perception Survey
2025-2026

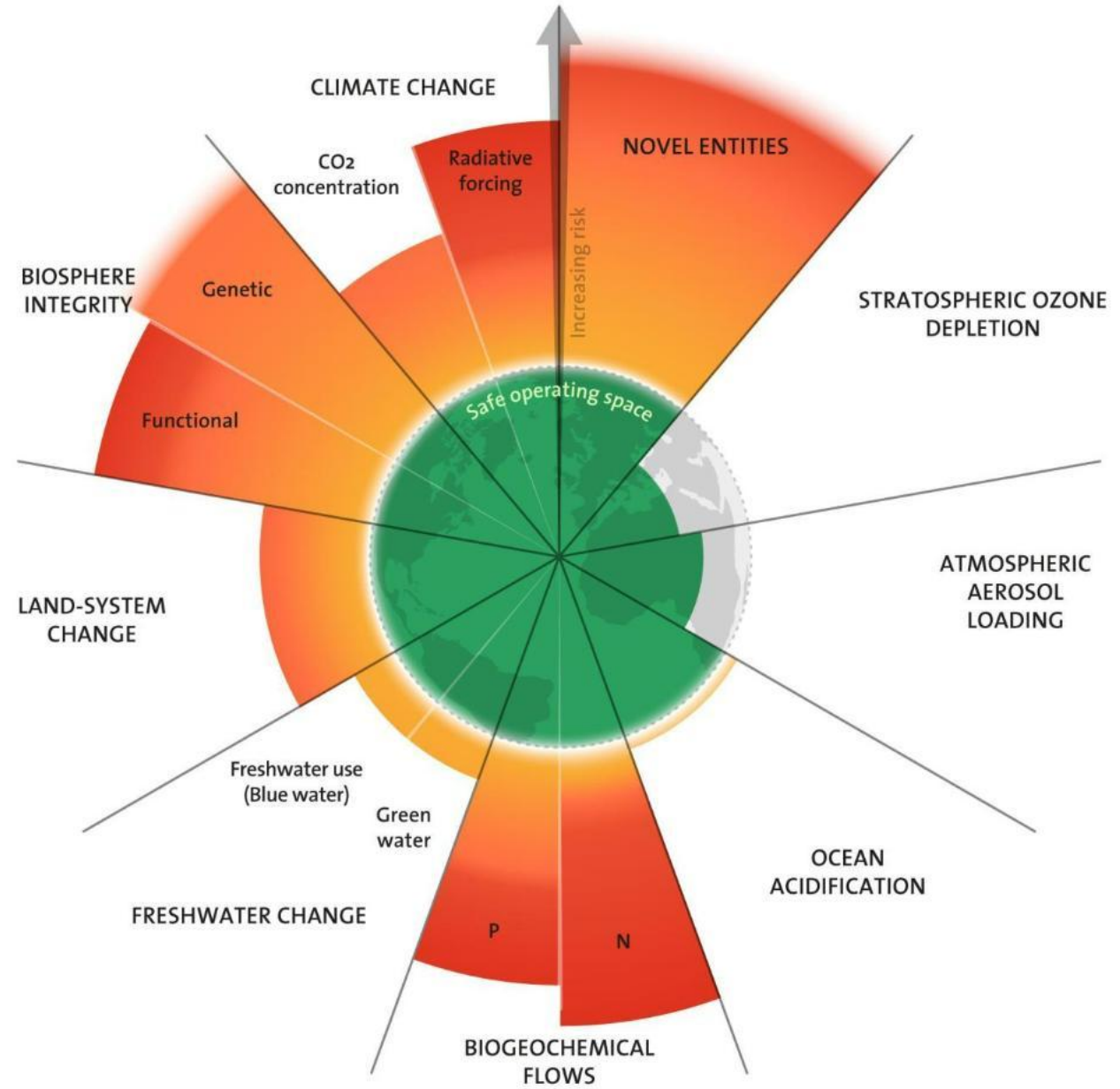
Risk categories

■ Economic
 ■ Environmental
 ■ Geopolitical
 ■ Societal
 ■ Technological

<https://www.weforum.org/publications/global-risks-report-2026/>

Planetary Boundaries 2025

<https://www.stockholmresilience.org/research/planetary-boundaries.html>



WALTER J. RADERMACHER



United Nations

<https://sdgs.un.org/goals>




**SUSTAINABLE
DEVELOPMENT
GOALS**

See all

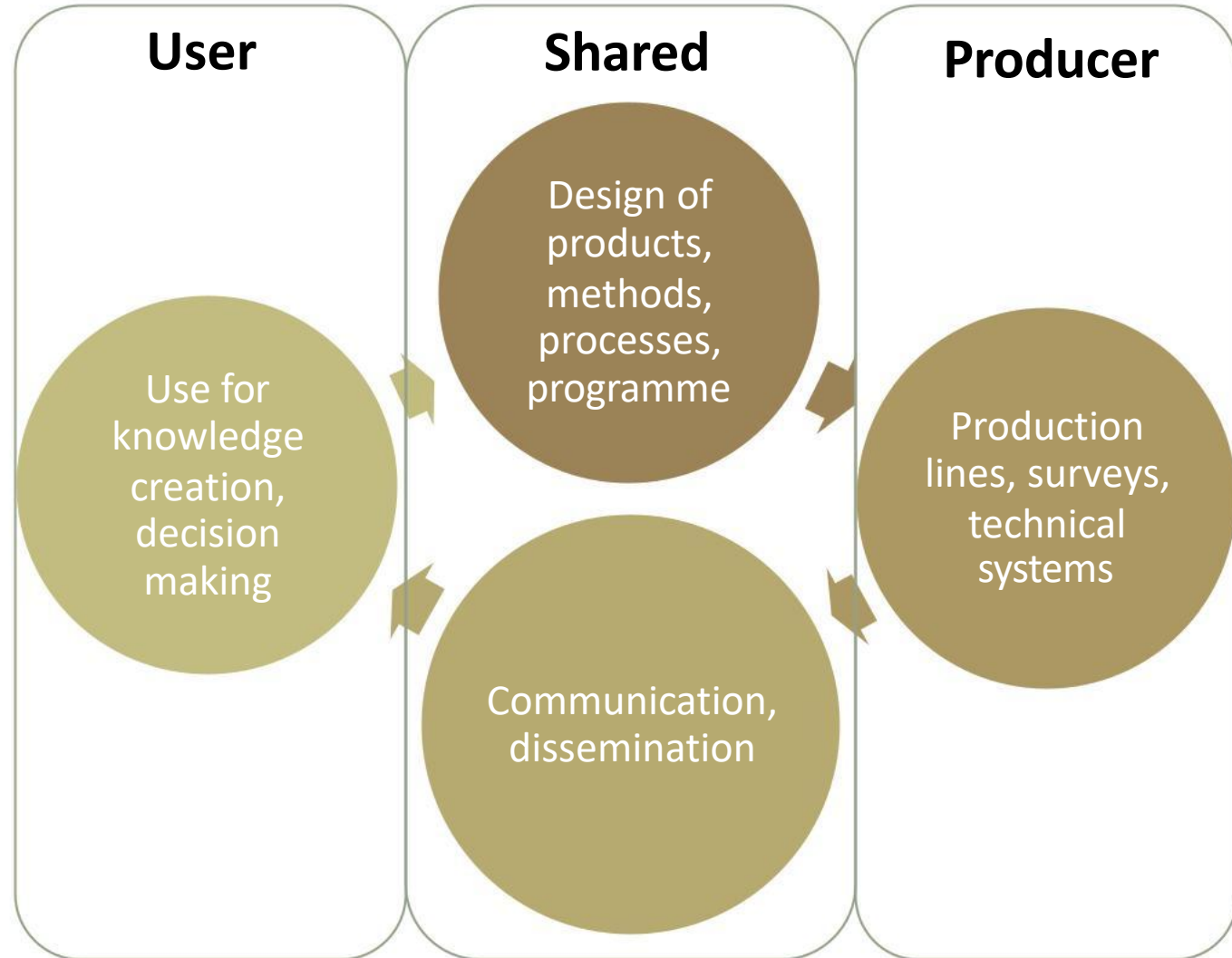
“HOW” do we quantify this reality?

CONVENTIONS IN PUBLIC STATISTICS

Standards

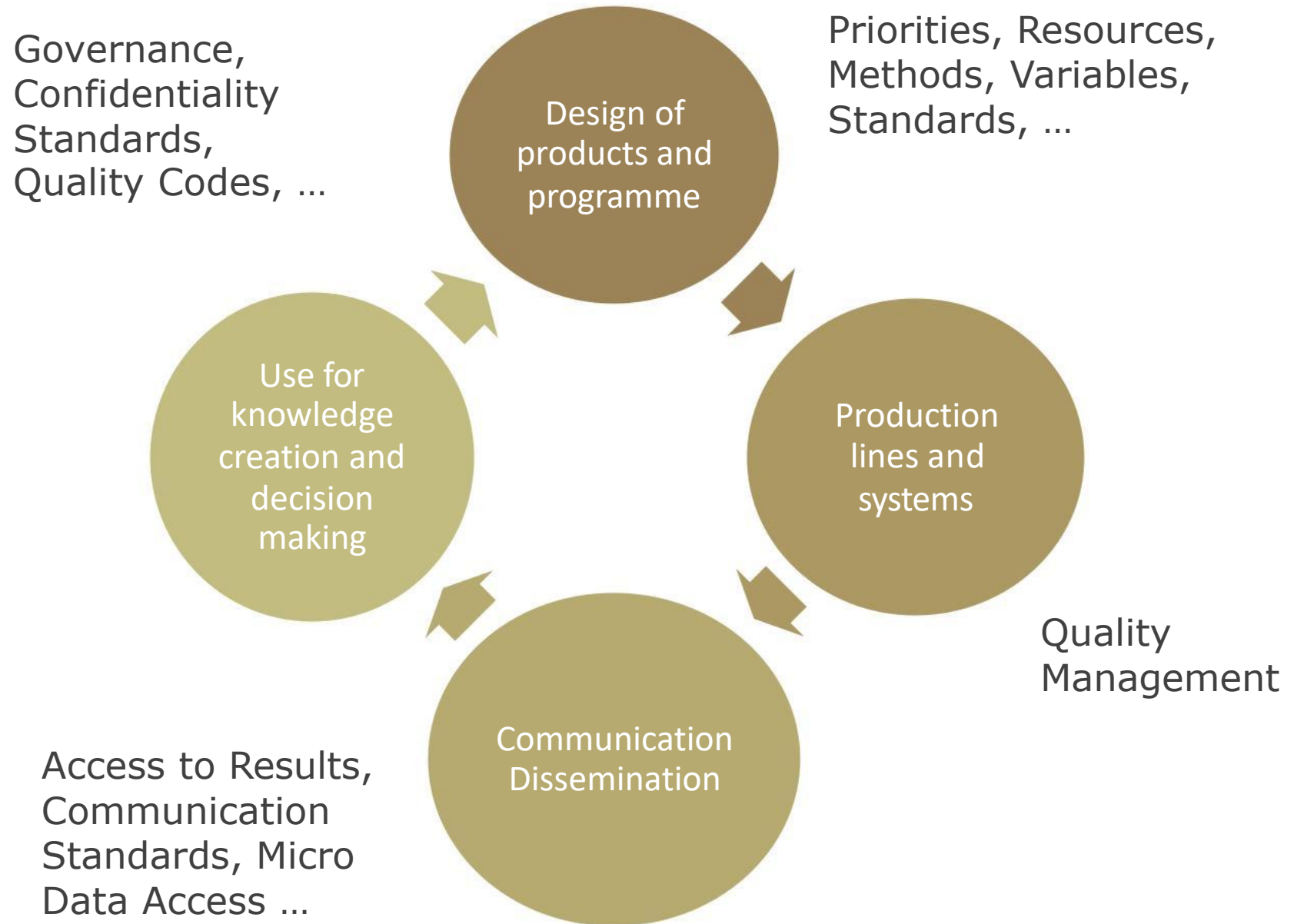
CONVENTIONS (STANDARDS) IN PUBLIC STATISTICS

Spheres of responsibility in statistical value chains



Factory Statistics: Main Processes

Conventions

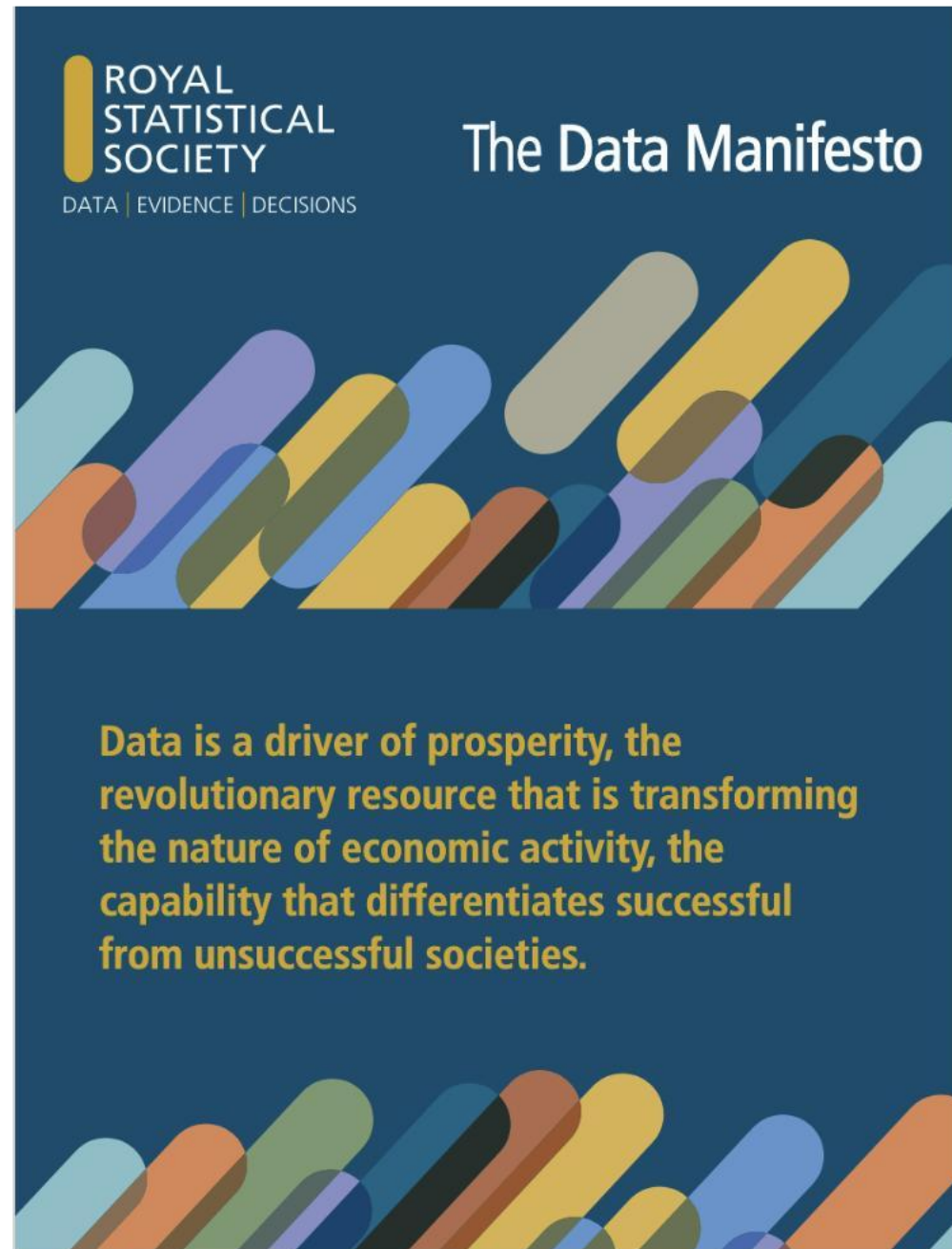


Data Manifesto

TODAY, TOMORROW AND THE DAY AFTER TOMORROW

UK 2019

<https://rss.org.uk/policy-campaigns/our-campaigns/our-asks-of-government/>



WALTER J. RADERMACHER



2026

The vision

We envision the future statistician as a trusted, tech-enabled leader of evidence — combining rigorous statistical foundations with strengths in AI, communication and data stewardship to deliver ethical, timely analysis for better public decisions. The report pairs enduring professional principles with new skills and responsibilities needed for the decade ahead.

The report also identifies five priority areas for action:

Equip Statisticians for Technological Change: Strengthen training, modern data infrastructure and AI leadership, working closely with digital and data professions.

Clarify Professional Identity and Skills: Update role definitions and competency frameworks to reflect new skills and specialisms within multi-disciplinary teams.

Support Career Progression and Learning: Create structured CPD across all career stages, fostering talent retention, cross-sector learning, and consistency in skills and expertise.

Integrate Statisticians: Embed statistical expertise across government, including in early in decision-making; promote collaboration with key departments; and share best practice for evidence-based policymaking.

Empower Statisticians as Arbiters of Truth: Build confidence in challenging misinformation and communicating transparently to maintain public trust.

<https://rss.org.uk/news-publication/news-publications/2026/general-news/the-future-statistician-our-joint-vision-with-the/>



Prof. Dr. Georges-Simon Ulrich ✓ · 1st

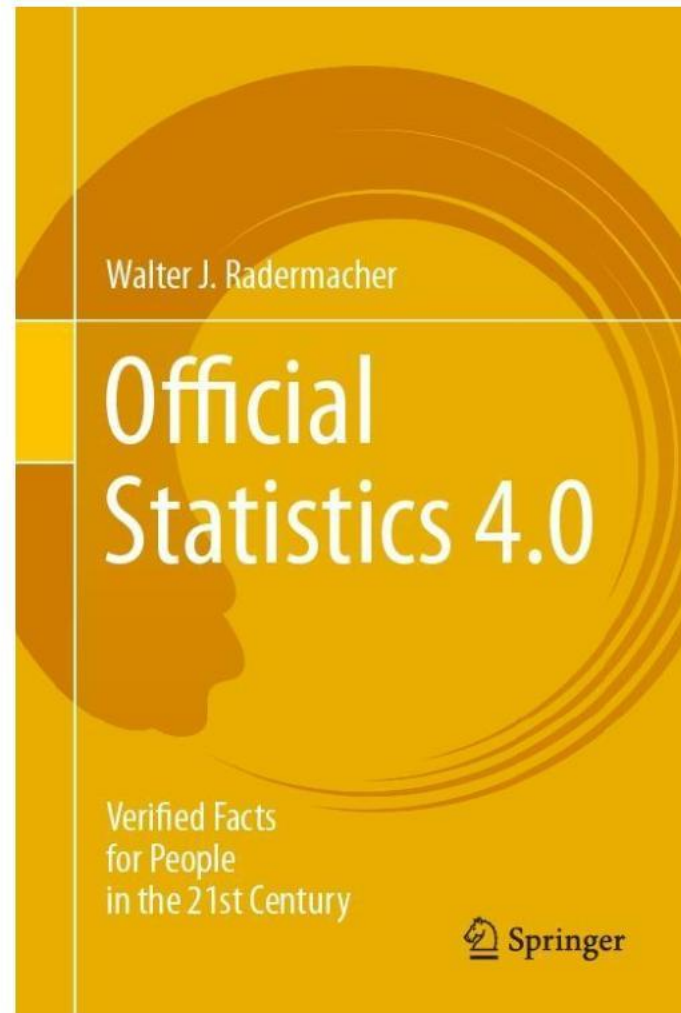
Chief Statistician Switzerland / Data Steward of Switzerland / Chair UN Statistical Commission / Prof (Research Methods & Strategy) / Official Statistics, Data Science & Governance

https://www.linkedin.com/posts/prof-dr-georges-simon-ulrich-092b7a22_5-key-takeaways-for-this-week-for-the-statistical-activity-7424040114734927872-lJhU?utm_source=share&utm_medium=member_desktop&rcm=ACoAABa-g44B69Plc4H-20rRu3hQuwG8zVA7GwI

5 key takeaways for this week for the statistical and data institutions around the globe:

- 1 AI is changing how knowledge is produced and consumed. If official statistics and administrative data are not machine-readable and semantically clear, AI systems will fill the gap with weaker, less trustworthy sources.
- 2 AI needs an epistemic backbone. Reliable, well-governed data and metadata are the way to anchor AI outputs in shared facts rather than probabilistic narratives.
- 3 Statistical offices provide this backbone. They combine methodological rigor, transparency and public accountability.
- 4 This cannot be built by single institutions alone. AI-ready statistics and administrative data require federated cooperation, common standards and shared infrastructure across countries and institutions.
- 5 Power must remain distributed and democratically governed.

MUCHAS GRACIAS
MUITO OBRIGADO
VIELEN DANK
THANK YOU
MERCİ BIEN



 Walter J. Radermacher

 +49 15111782920

 wjr@outlook.de



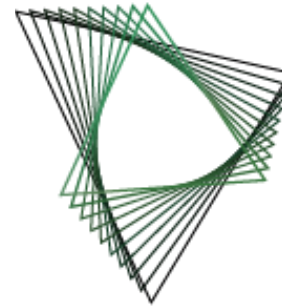
<https://www.springer.com/gp/book/9783030314910>

Funded by

DFG

Deutsche
Forschungsgemeinschaft

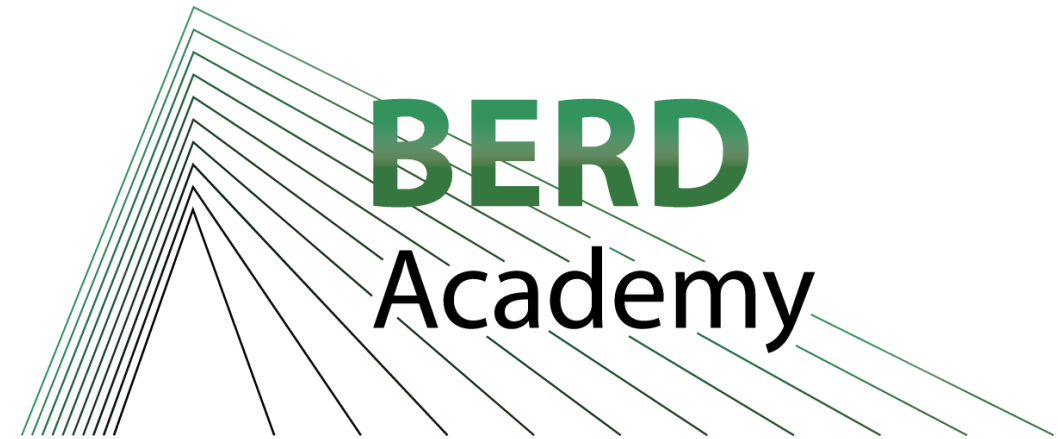
German Research Foundation



BERD
@NFDI

Funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) under the National Research Data Infrastructure – NFDI 27/1 - 460037581 - BERD@NFDI

*The views expressed in this video do not reflect those of the **BERD@NFDI** or the **Deutsche Forschungsgemeinschaft** (DFG, German Research Foundation).*



© Walter J. Radermacher, *Data 4 Policy Why Quantification Matters in Modern Society*, 2026. Licensed under CC BY 4.0. This material was prepared within the BERD@NFDI consortium in the context of the work of the National Research Data Infrastructure (NFDI) Association. NFDI is funded by the Federal Republic of Germany and the 16 federal states. The BERD@NFDI consortium is supported within NFDI by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) – NFDI 27/1-2026, project number 460037581.