Pathos

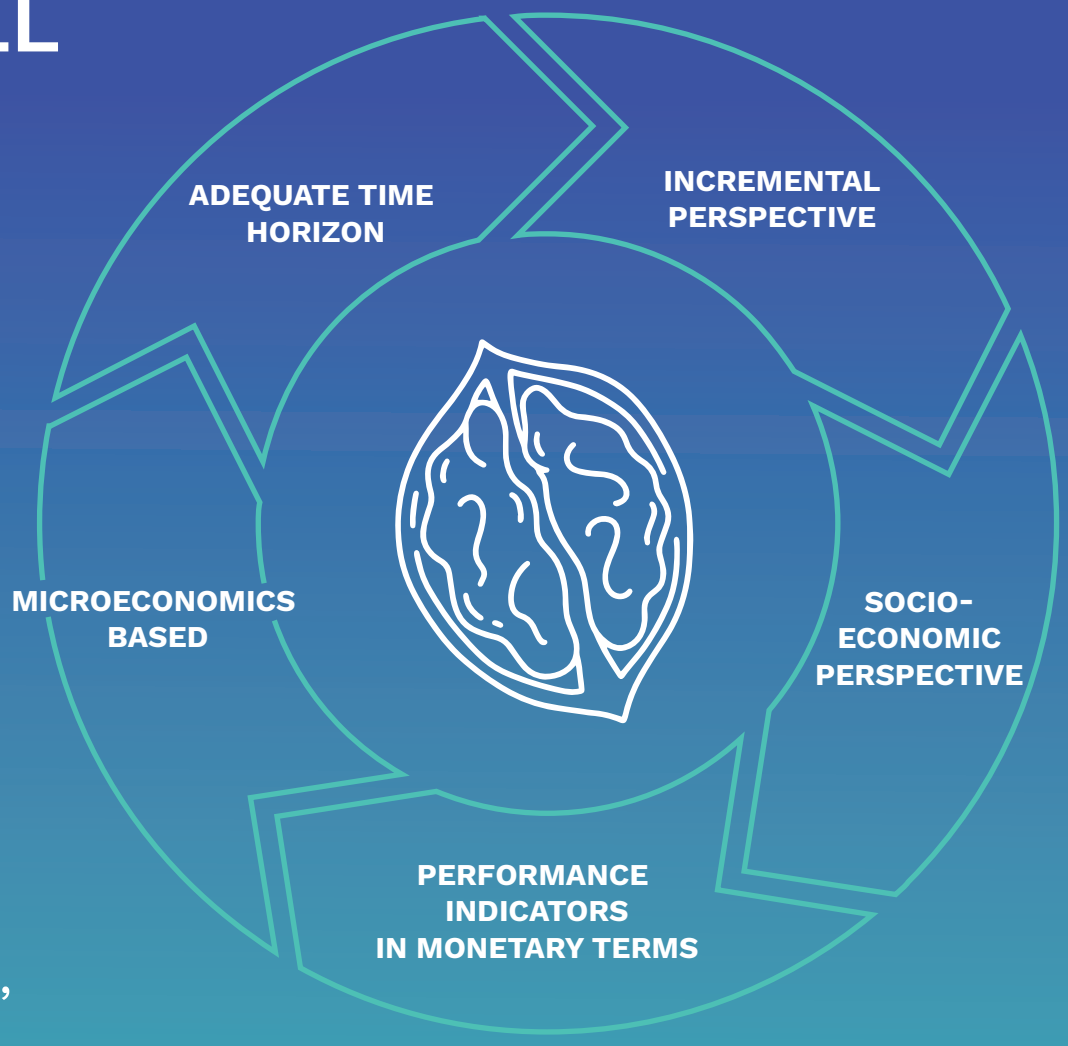
WHAT VALUE DOES OPEN SCIENCE CREATE AND FOR WHOM?

A Cost-Benefit Analysis (CBA) framework for Open Science practices provides a **structured** and **evidence-based** approach to assess their **impacts**—comparing associated costs and benefits against a scenario without them.

CBA IN A NUTSHELL

A trusted and systematic approach

CBA is used by EU institutions, national and international public agencies to support investment decisions across many sectors.



A simple decision rule

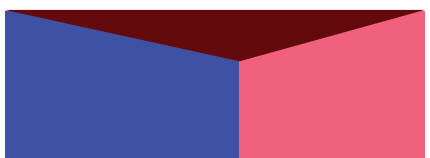
An investment is deemed desirable when its total benefits, to everyone affected, exceed its total costs.

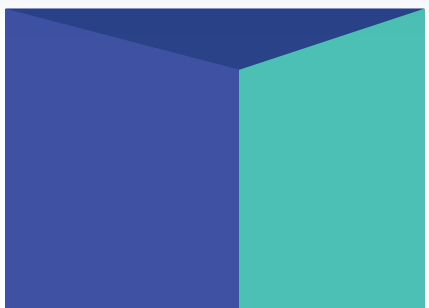
TYPICAL COSTS OF OPEN SCIENCE

- **Set-up costs**
- **Operational costs**
- **Users' costs**
  (e.g. time spent to become efficient users and/or for updates).

TYPICAL BENEFITS OF OPEN SCIENCE

- **Saved time in data/information retrieval**
- **Time and effort saved in working activities**
  (e.g. avoiding duplication)
- **Lower expenses related to data storage**
- **Reduced time and costs associated with negotiating access to alternative data sources**

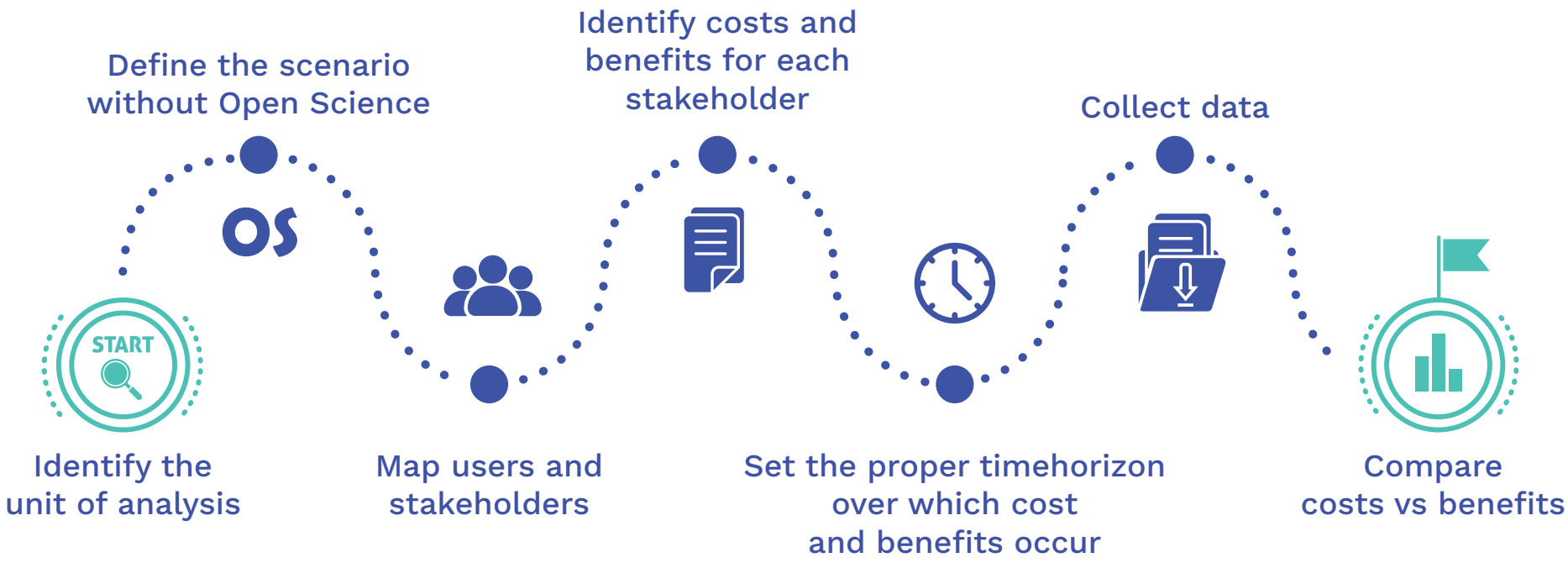




READ THE FULL METHODOLOGICAL NOTE

TIPS FOR APPLYING CBA TO OPEN SCIENCE PRACTICES

FOLLOW OUR ROADMAP!



- **OS initiatives are inherently collaborative**, so it's essential to clearly define the roles and contributions of each partner to properly scope the analysis.
- **Ask: What if the OS resource didn't exist?** This reveals its true value and what would be lost without it. Modular scenarios can help capture this in the OS context.
- **Measuring impact is challenging** because OS resources are freely accessible — but it's achievable, especially with AI-powered tools and methods. Tracking usage requires both granular and accurate metrics, as well as expertise in interpreting these data

FUTURE AVENUES

Promote systematic data collection. Establish systems to track usage, user profiles, and operational costs. Even without full internal CBA capacity, this data lays the groundwork for future analysis, external evaluation and informed decision making.

Strengthen institutional CBA capacity. Invest in training to conduct or commission CBAs effectively, equip resource managers with practical tools, and provide simplified, user-friendly templates tailored to different OS resources such as repositories, platforms, or software.

Embed CBA in funding and evaluation. Integrate CBA elements into project selection, evaluation, and impact reporting to improve transparency and accountability. Leverage CBA metrics in ex-post assessments to guide future resource allocation.

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