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Creating an Enabling Policy Environment for Open Science

Fostering a Future of Collaborative, Transparent, and Impactful Research

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The Challenge We Face

Our world faces unprecedented challenges: climate change, global health crises, resource scarcity.

The solutions demand faster discovery, deeper collaboration, and greater trust in science.

The question isn't *if* we can solve them, but how we can accelerate the process.

The answer lies in fundamentally changing how we create and share knowledge.

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Agenda: Our Journey Today

The Promise: What is Open Science and Why Now?

The Blueprint: The 5 Pillars of an Enabling Policy

The Reality: Navigating the Real-World Challenges

The Action: Our Shared Responsibility to Build the Future

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What is Open Science? (It's a Cultural Shift)

It's not just "free articles." It's an umbrella for making the entire research lifecycle transparent, inclusive, and accessible.

- **Open Access Publications:** Barrier-free access to papers.
- **Open Research Data:** Sharing the underlying evidence.
- **OpenSource Software & Hardware:** Sharing the tools of discovery.
- **Open Methodology:** Transparent peer review and protocols.
- **Citizen Science:** Engaging the public as partners in research.

Open Science builds a system of trust and accelerates discovery.

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The Urgency: Why This is a Global Imperative

For **Science**	For **Society**	For the **Economy**
Enhances **Reproducibility** & Rigor	Accelerates **Solutions** (e.g., vaccine development)	Drives **Innovation** & Entrepreneurship
Breaks Down **Silos** & Fosters Collaboration	Increases Public **Trust** in Science	Optimizes Investment in **Publicly-Funded Research**
Democratizes **Access** to Knowledge	Enables **Evidence-Based** Policymaking	Creates a **Skilled Workforce** Ready for a Data-Rich World

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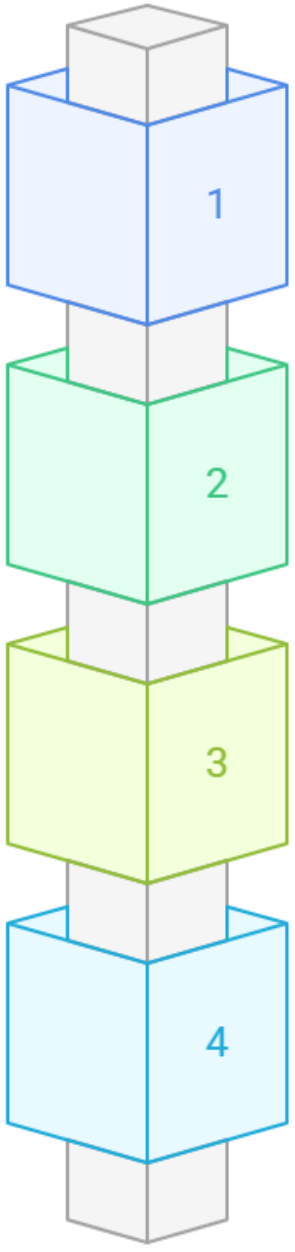
Pillar 1: Open Access to Knowledge

Policy Goal: All publicly funded research publications must be made immediately and freely available.



Policy in Action: A multi-faceted approach that combines top-down mandates from funders with flexible compliance routes for researchers

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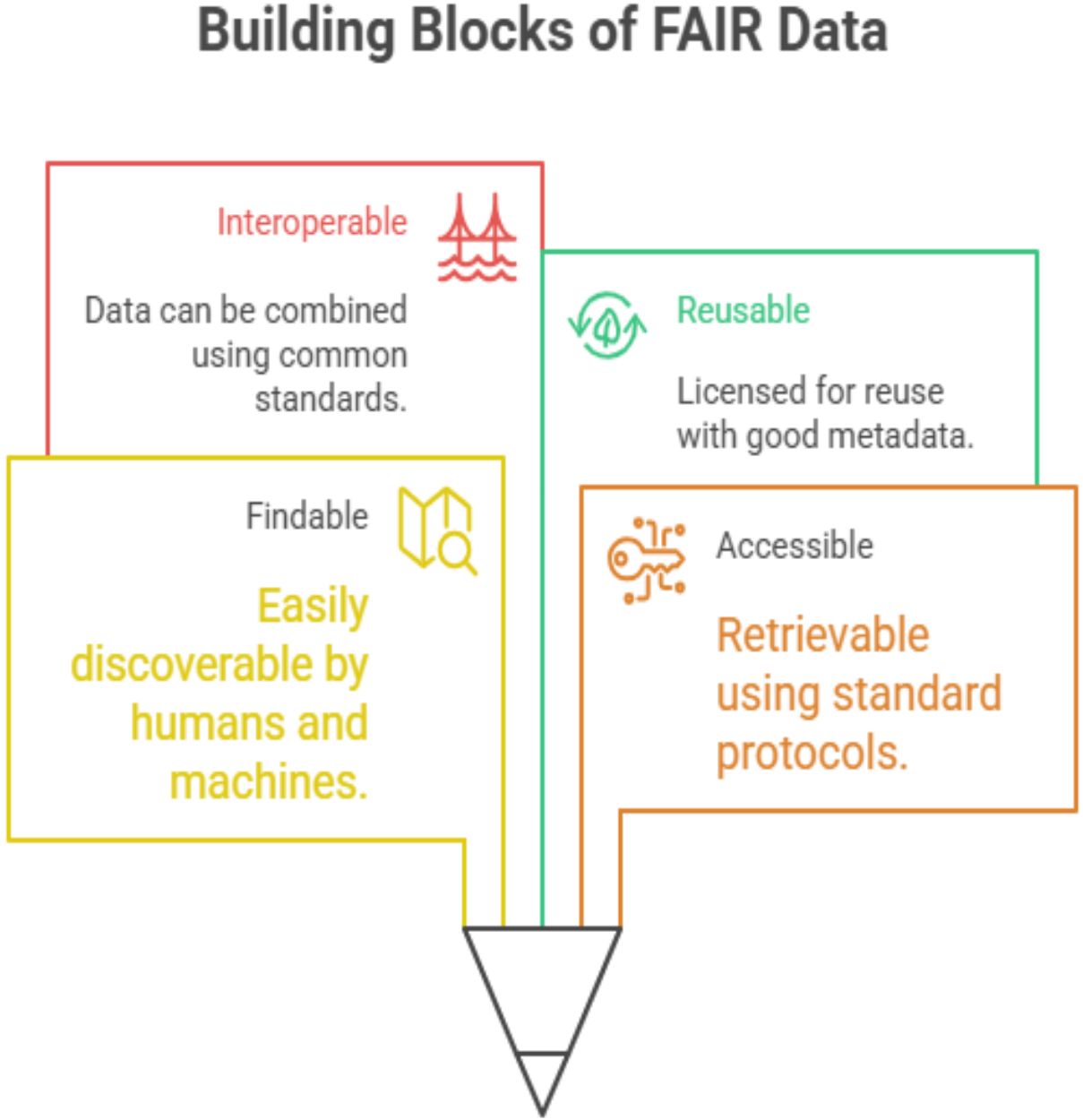
Pillar 2: Making Research Data FAIR and Open

Policy Goal: Make research data "as open as possible, as closed as necessary." The default should be open.



Policy in Action: Require Data Management Plans (DMPs) at the grant application stage.

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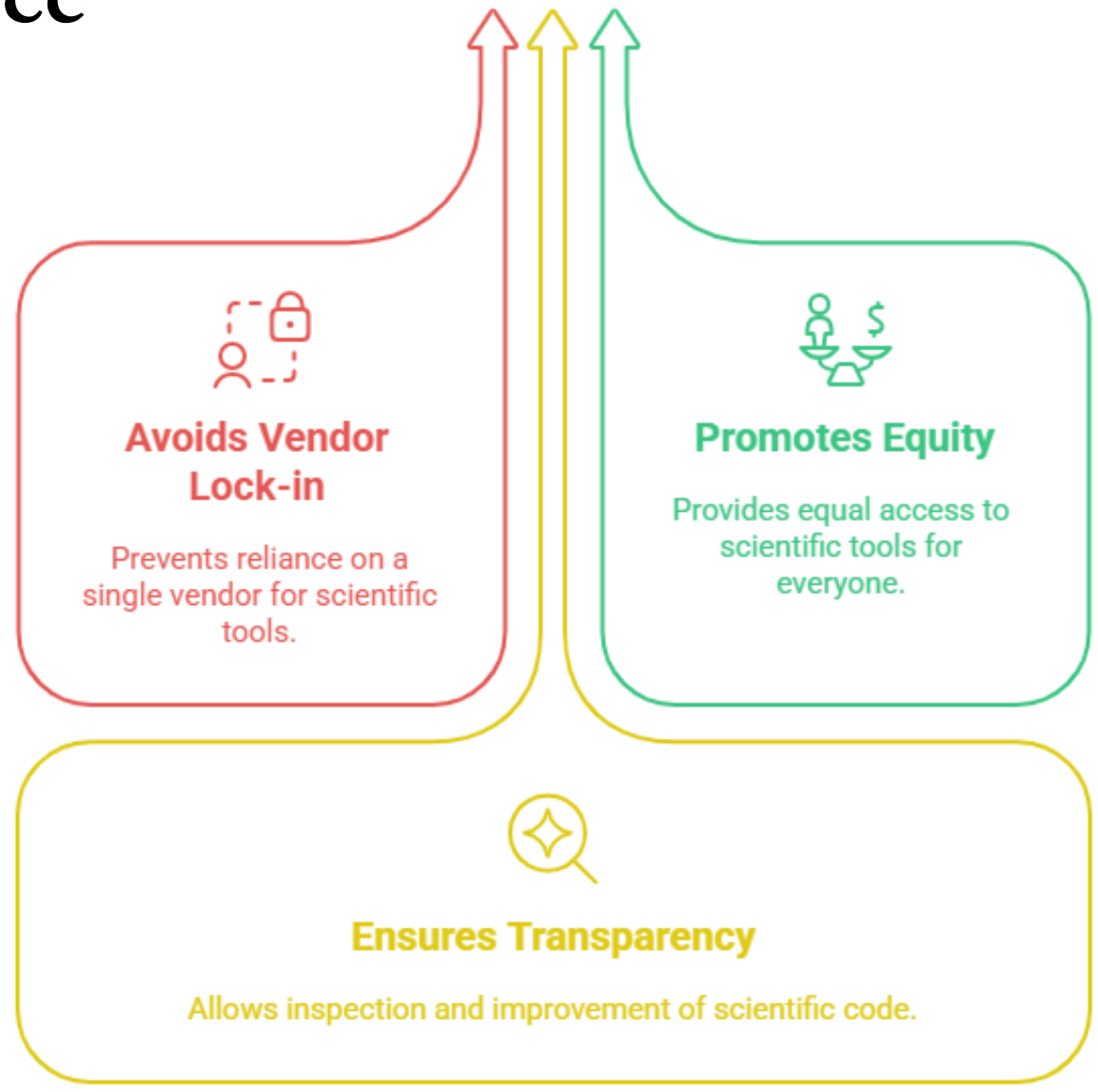
Pillar 3: OpenSource Infrastructure & Tools



Policy Goal: Foster and sustain a non-proprietary, community-governed ecosystem for research tools.

Policy in Action: Prioritize funding for open-source software development and shared computing resources.

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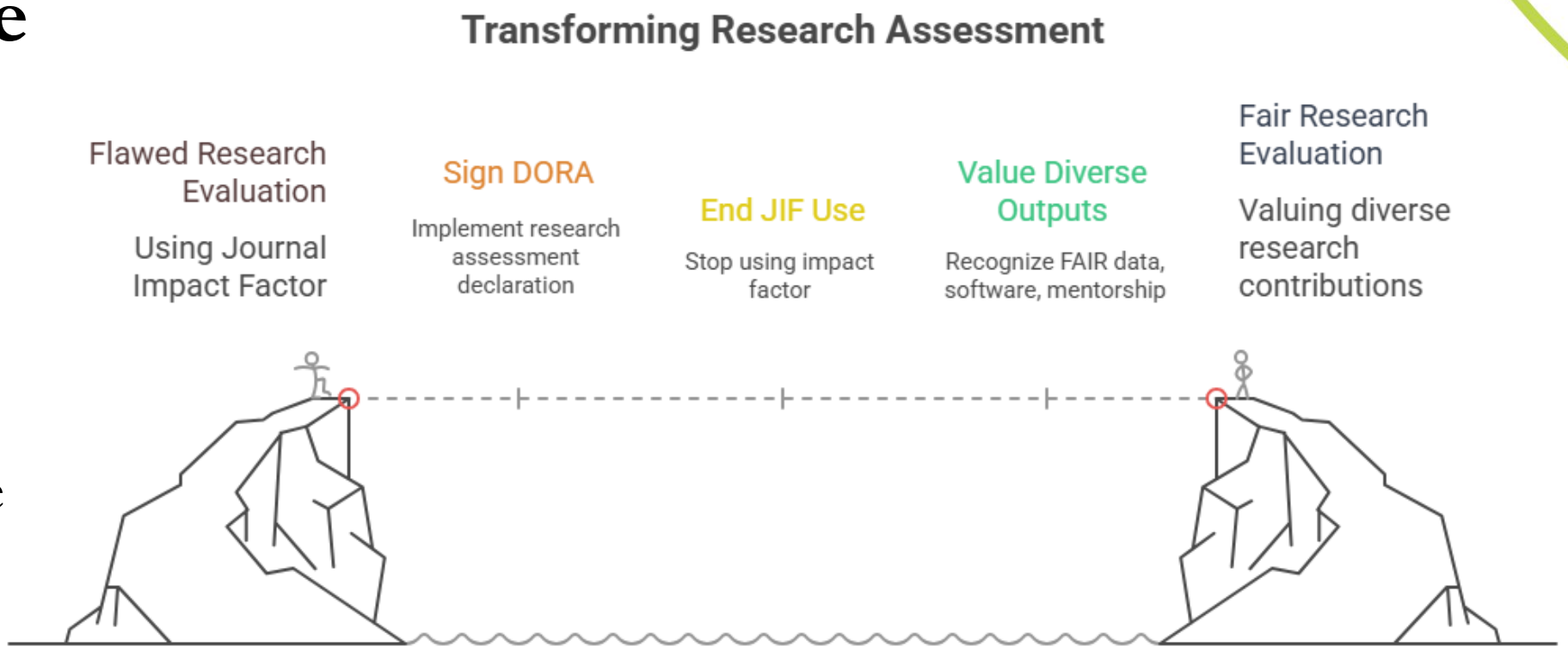
Pillar 4: Reforming Research Assessment (The Game Changer)



Policy Goal: Recognize and reward the full range of research outputs and open practices in hiring, promotion, and funding decisions.

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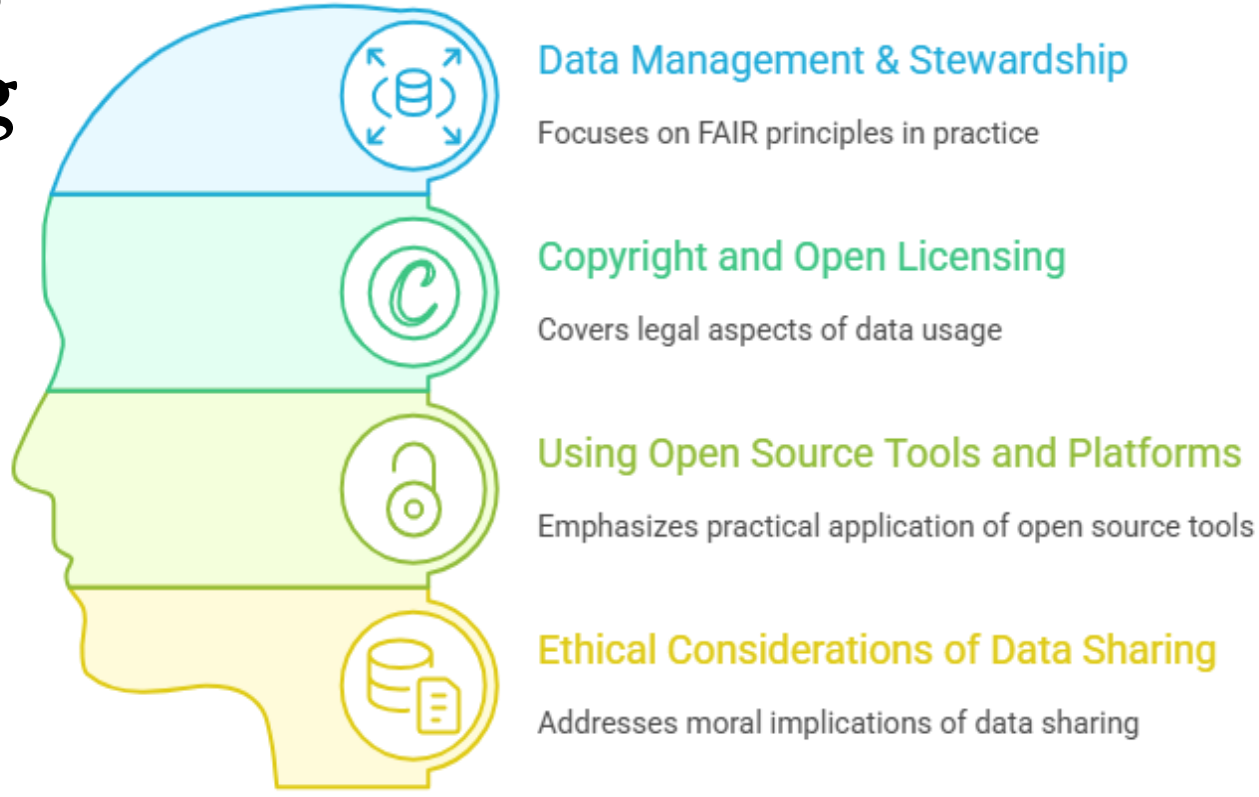
Pillar 5: People, Skills, and Capacity Building



Policy Goal: Equip researchers, librarians, and administrators with the knowledge and skills to practice Open Science effectively.

Policy in Action: Fund dedicated Data Steward positions within institutions and integrate Open Science principles into university curricula.

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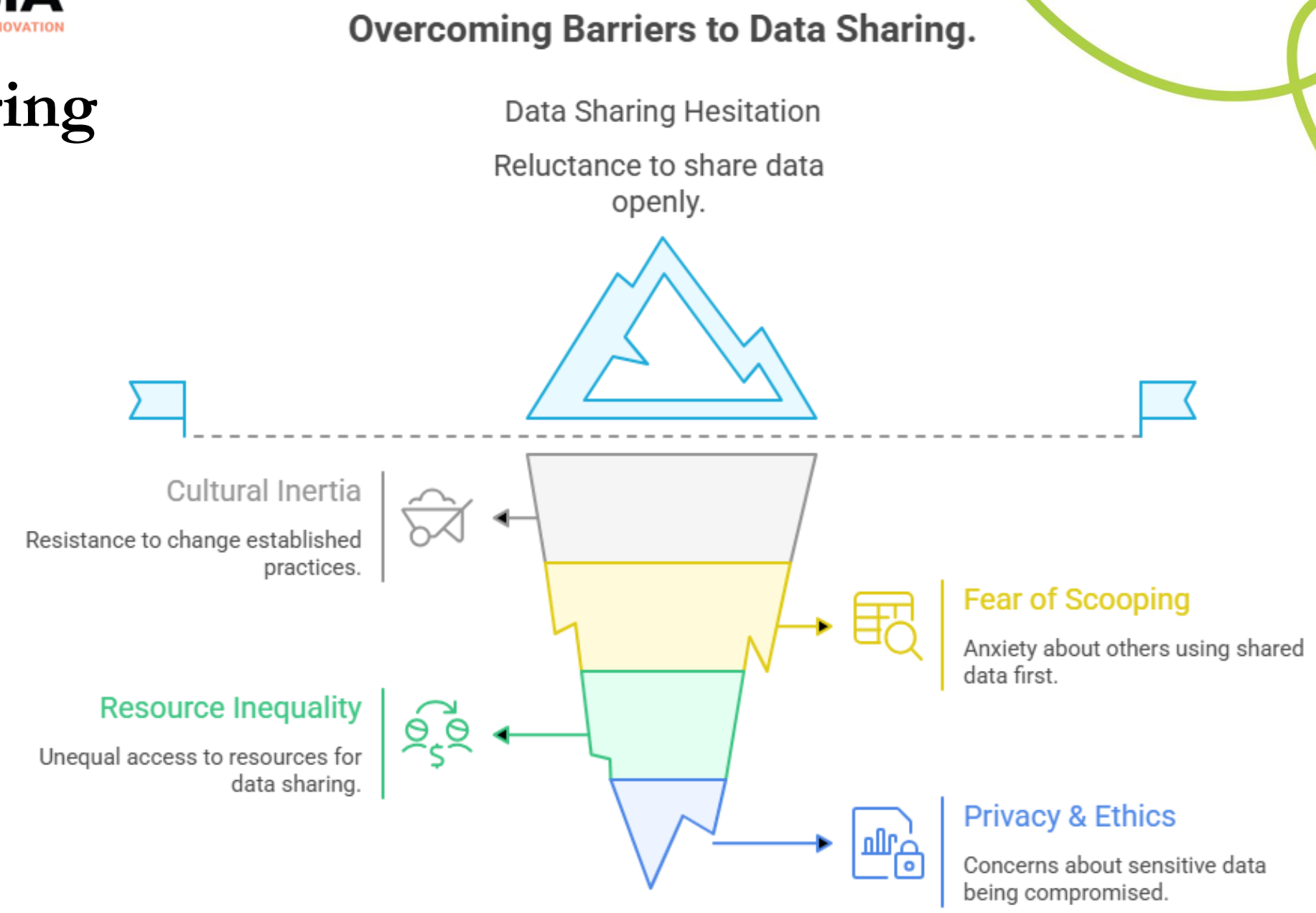
Acknowledging the Hurdles



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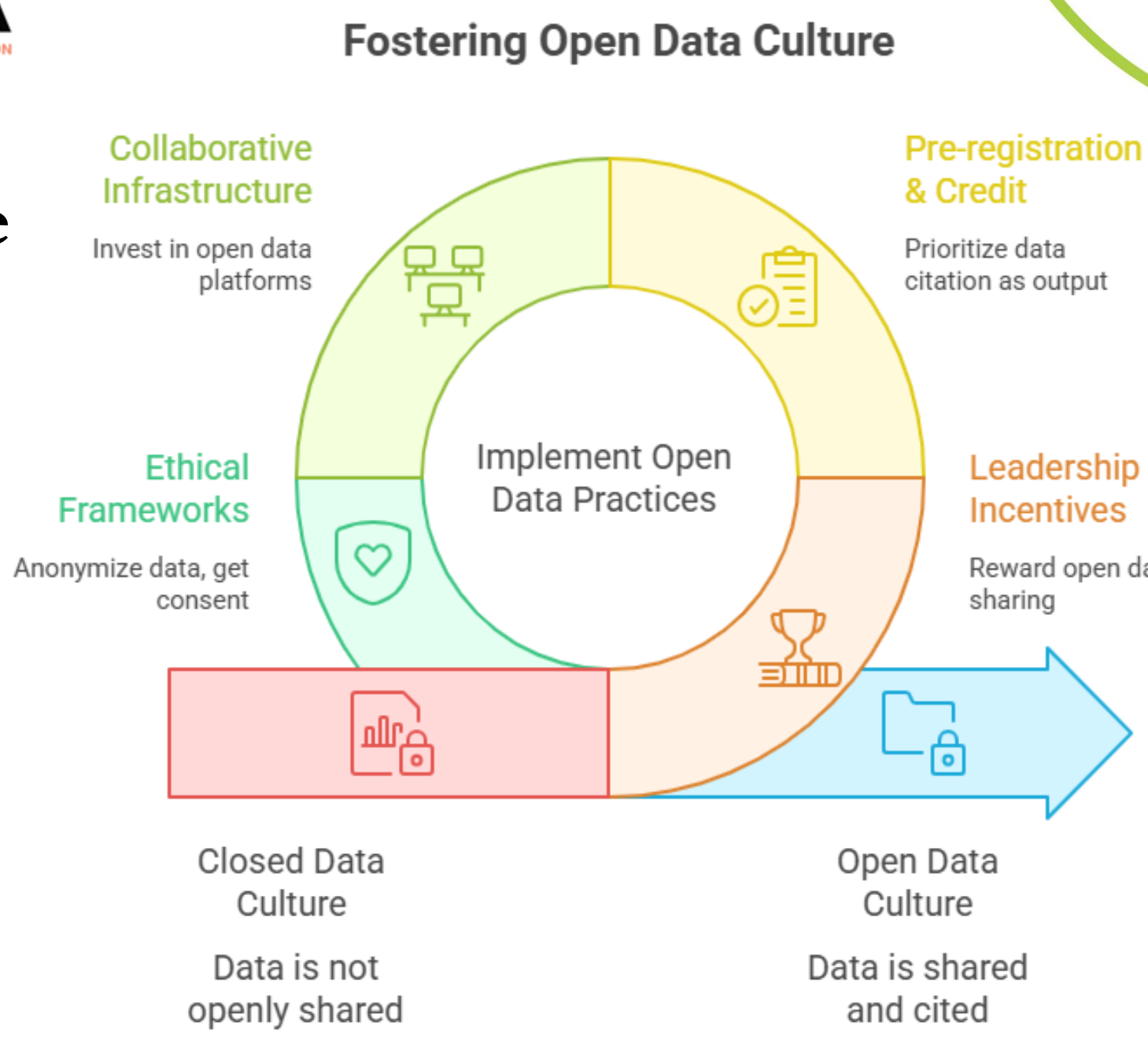
How to Overcome the Hurdles



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An Ecosystem Approach: We All Have a Role

Stakeholder Roles in Open Research

1

University Leaders

University Leaders strategically reform internal hiring and promotion.

2

Policymakers & Funders

Policymakers & Funders drive strategic external change through mandates.

3

Researchers & Educators

Researchers & Educators operationally focus on internal change.

4

Publishers & Societies

Publishers & Societies operationally evolve external community models.

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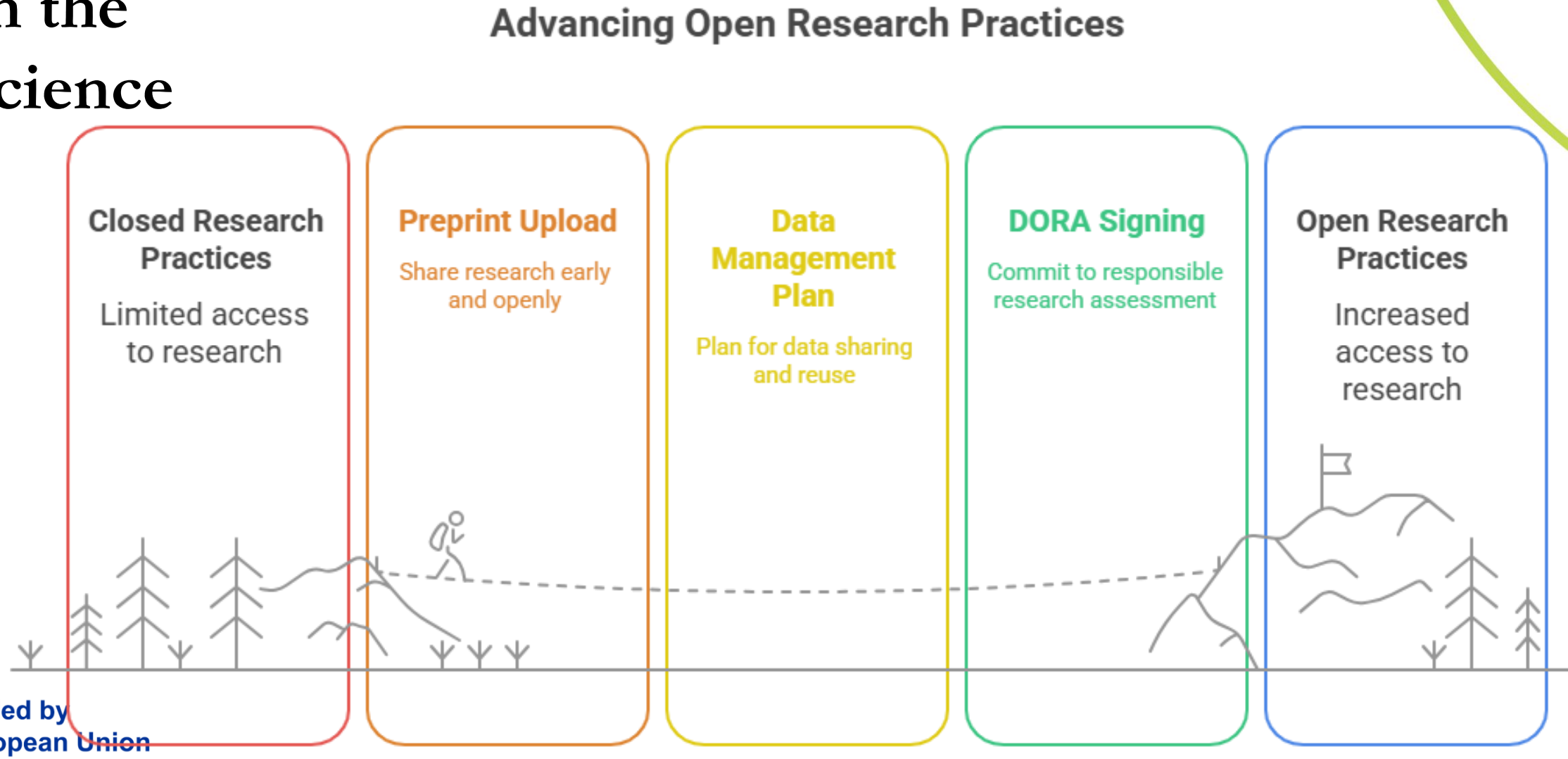
Your First Steps on the Open Science Path



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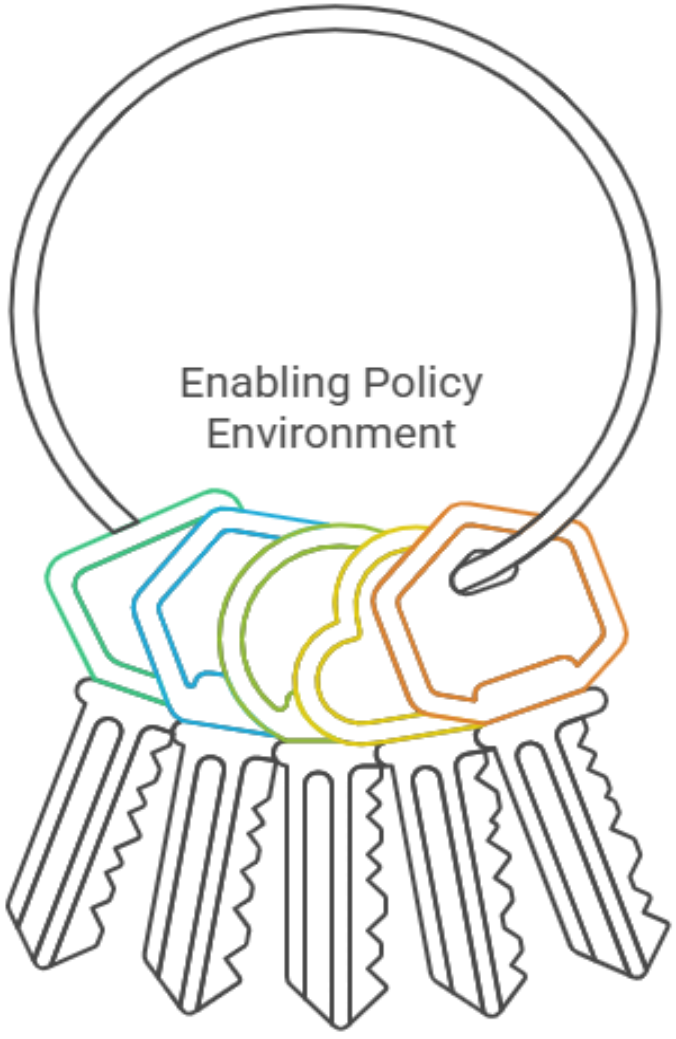
Final Thought

Building the Future of Science



Infrastructure for Curiosity

Fosters an environment where scientific inquiry thrives.

Blueprint for Trust

Establishes a foundation of reliability and transparency.

Foundation for Efficiency

Streamlines processes to maximize scientific output.

Foundation for Equity

Ensures fair access and opportunities in science.

Foundation for Capability

Enhances the ability to tackle global challenges.

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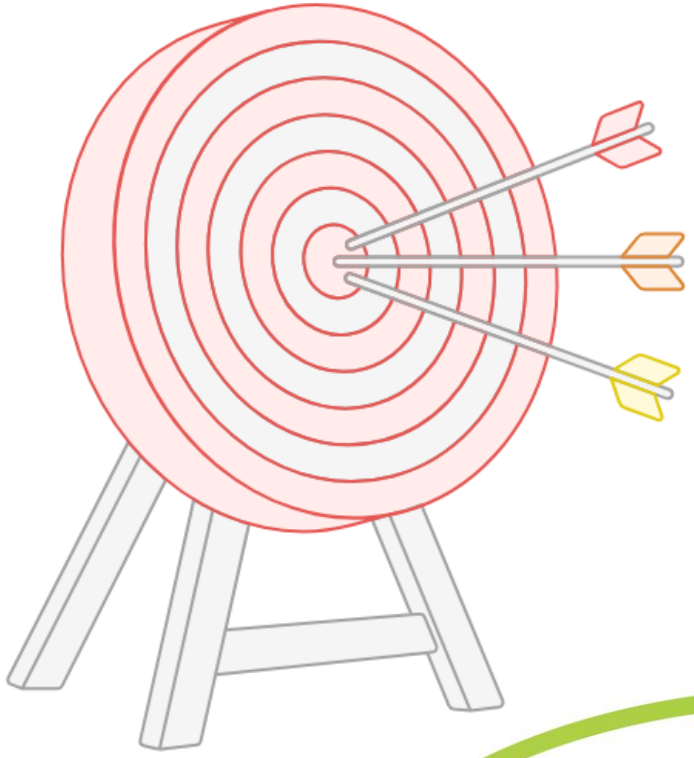
Expression of Gratitude



Thank You

Core expression of gratitude

Appreciation

Recognizing and valuing actions

Gratitude

Deep sense of thankfulness

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