

# CORE Principles

## for building sustainable research communities



# Communities we have managed



AI for Multiple Long-term Conditions  
Research Support Facility



Clinical AI

How can AI be usefully deployed to provide clinical benefits?

Modelling and high-precision forecasting of complex environmental systems to make leaps in weather prediction and sustainable energy

Environment and sustainability



Research Community Managers foster

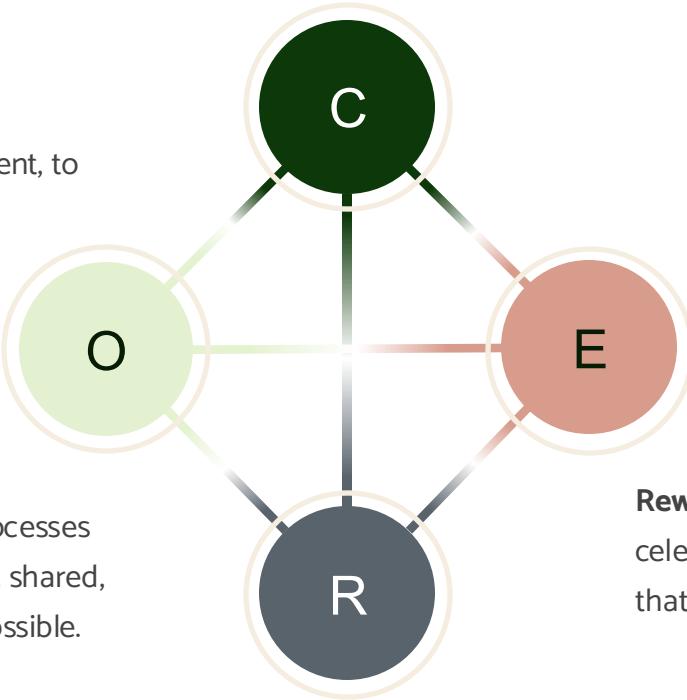
a **collaborative environment** where a  
**diverse community** can access the **socio-technical infrastructure** and **participatory processes** they need to **actively engage, gain recognition** and **build shared agency** over their work.



CC-BY 4.0 image by *The Turing Way* and Scriberia, Zenodo: <https://doi.org/10.5281/zenodo.3332807>.

# CORE Principles for sustainable research communities

**Calibrate:** Continuously measure interests, priorities and engagement, to understand and respond to your communities needs.



**Open:** Ensure knowledge, processes and roadmaps are accessible, shared, and transparent whenever possible.

**Empower:** Give members genuine agency, authority and mechanisms to shape the communities' activity.

**Reward:** Actively support, reward and celebrate all contributions, acknowledging that everything is valuable.

## Build trust

- Minimise information asymmetries
- Share roadmaps and progress towards milestones, with identifiable interaction points
- Be explicit about what information will remain confidential and why

## Support sustainability

- Assume there will be turn over in maintainers and leaders
- Document processes and decision making
- Aim for maximal reproducibility of activities and accessibility of materials

## Extrinsic motivators

- Understand how your community are motivated and build in meaningful benefits
- Acknowledge all contributions, especially outward-facing champions
- Aim for financial or time-based compensation for high expertise or workload tasks

## Intrinsic motivators

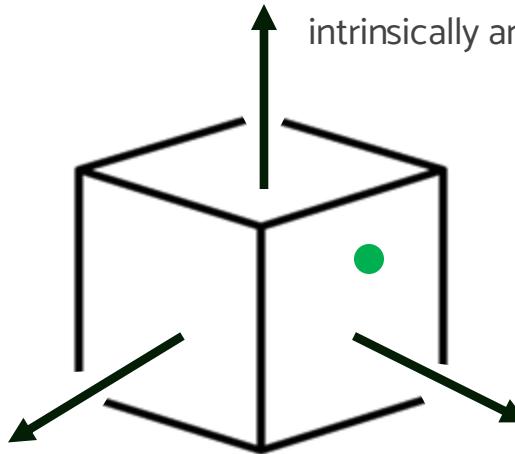
- Create a positive, welcoming and stimulating environment
- Tap into why people do this work and understand their core purpose
- Celebrate visibly and show your members you are grateful for their contributions.

Build pathways and mechanisms for community members to move around in these dimensions.

Potential community ‘leaders’ will be high in all three; a leadership pipeline is essential for sustainability.

**Autonomy:** Clear governance and decentralised decision making

**Engagement:** Varied and accessible engagement opportunities which are intrinsically and extrinsically rewarding



**Collaboration:** Practice and normalise and facilitate

## Know community priorities

- Deliver what your community tell you they want (maximises engagement)
- Trust their expertise in the problem space and developing solutions
- Listen deeply and regularly

## Measure community health

- Know who is engaging and where
- Know who is not engaging
- Watch for indicators of leadership pipeline
- Carefully manage data about your community members

# CORE Infrastructure

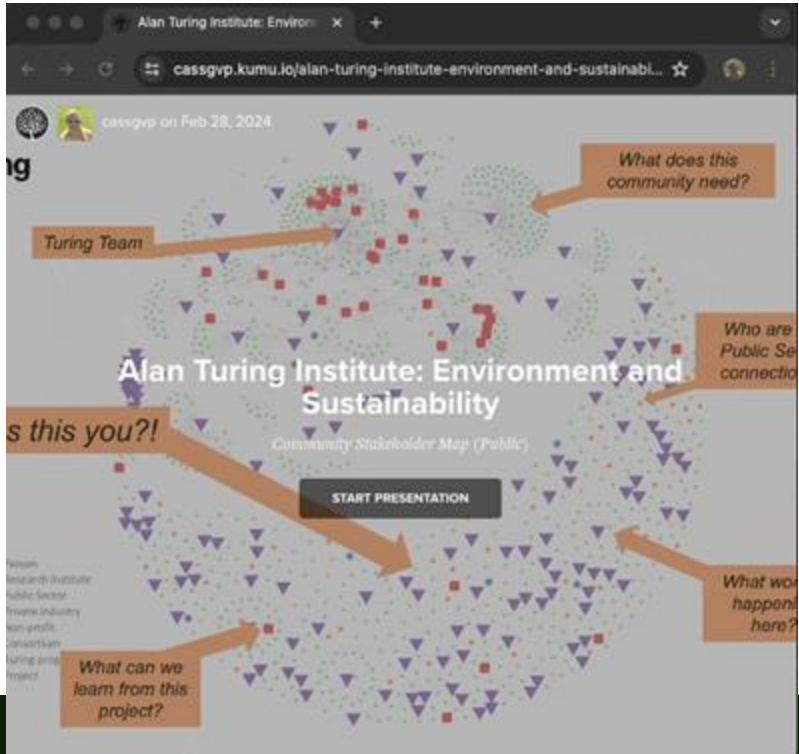


- **Calibrate:** Track engagement
- **Open:** Transparency and privacy mechanisms
- **Reward:** Attribution by default
- **Empower:** Reproducibility and decentralised contributions



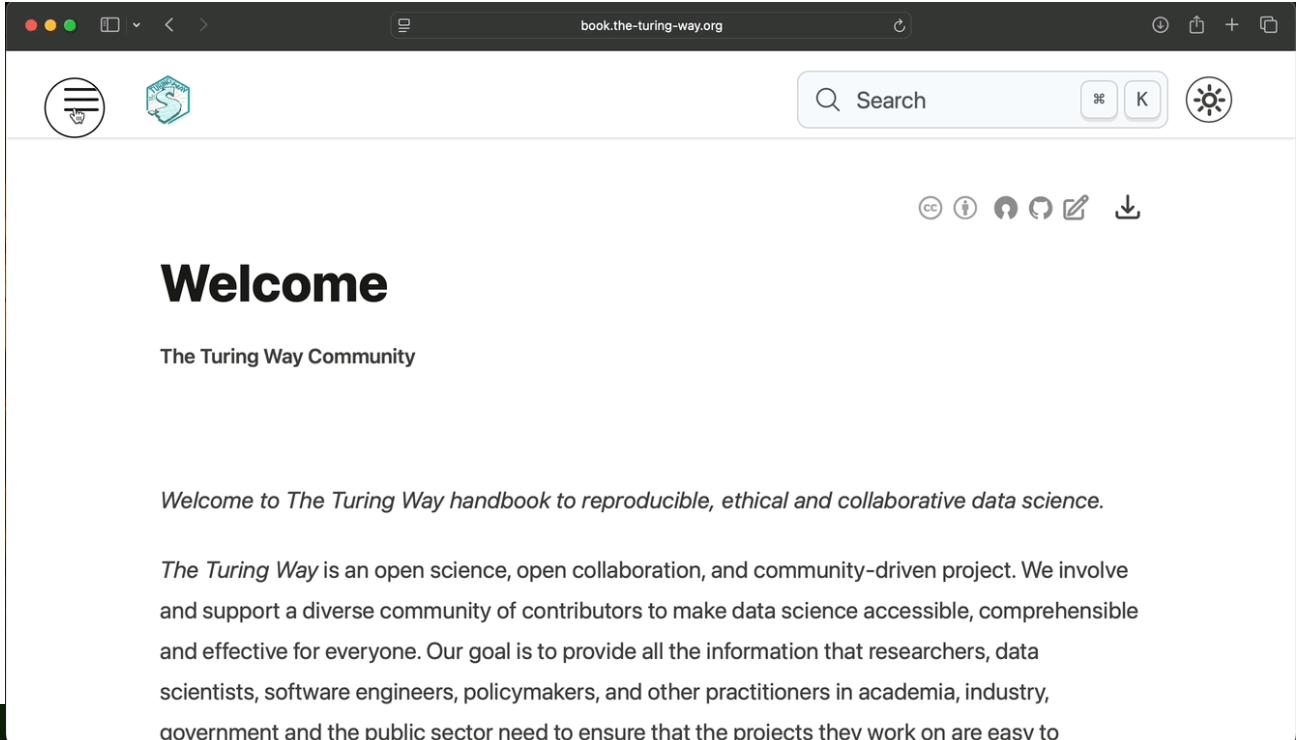
- **Calibrate:** Low-effort engagement
- **Open:** Public channels, open communication
- **Reward:** Celebrations and gratitude   
- **Empower:** Self organising

# CORE Processes: Community Mapping



- Data held in SharePoint lists => Kumu.io
- [github.com/rcmcooperative/community-mapping](https://github.com/rcmcooperative/community-mapping)
- **Calibrate**: RDM about your community
- **Open**: Consented public maps
- **Reward**: Member visibility
- **Empower**: Information symmetry

# CORE Processes: Documentation



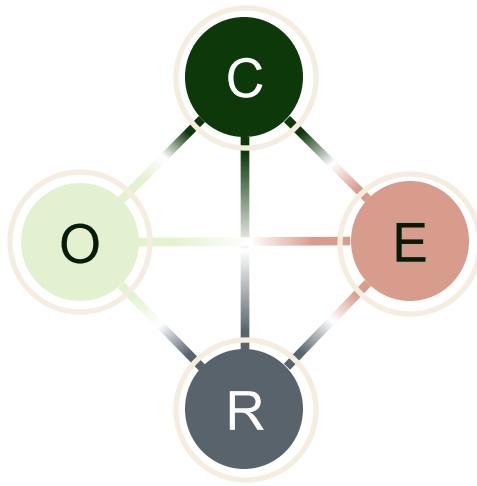
The Turing Way Community

Welcome to *The Turing Way* handbook to reproducible, ethical and collaborative data science.

*The Turing Way* is an open science, open collaboration, and community-driven project. We involve and support a diverse community of contributors to make data science accessible, comprehensible and effective for everyone. Our goal is to provide all the information that researchers, data scientists, software engineers, policymakers, and other practitioners in academia, industry, government and the public sector need to ensure that the projects they work on are easy to



- **Calibrate:** Fast publishing
- **Open:** Share processes
- **Reward:** Attribution
- **Empower:** Decentralise



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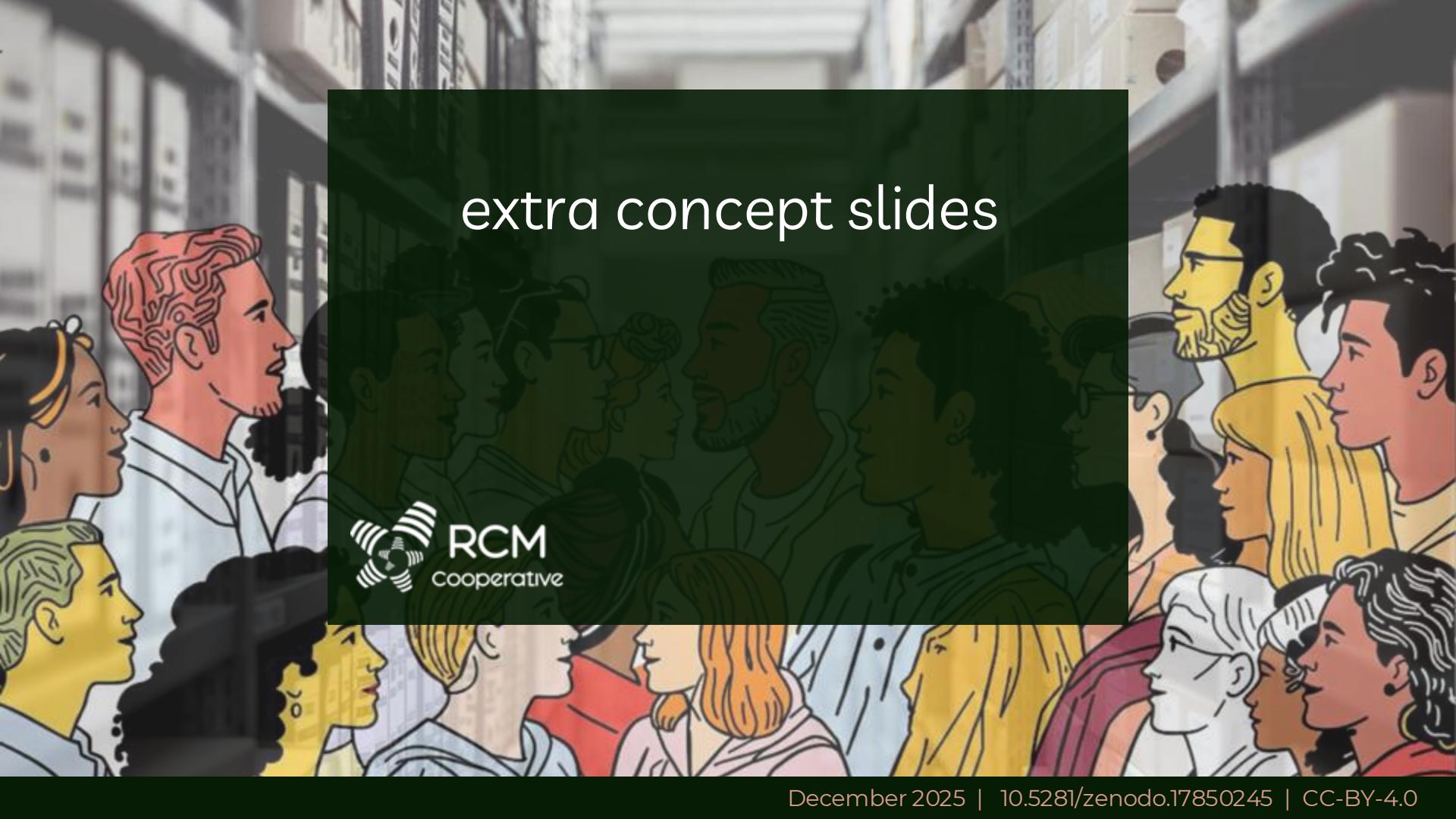


<https://doi.org/10.48550/arXiv.2409.00108>

✓ Sustainable

✓ Impactful

✓ Complex problem solving



# extra concept slides



# PURPOSE OF COMMUNITY

## A market tool

- Creating a loyal customer base
- Feeling connected to the brand
- Boost product adoption and brand loyalty

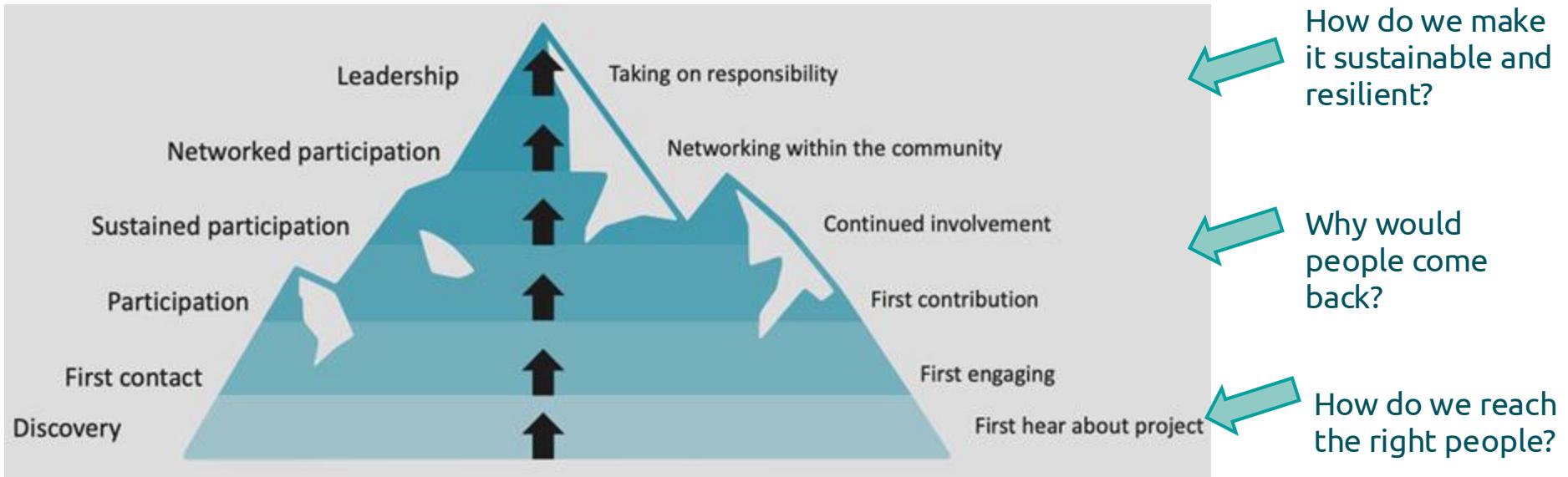
Community consumes the brand and advocates for it!

## A collaborative ecosystem

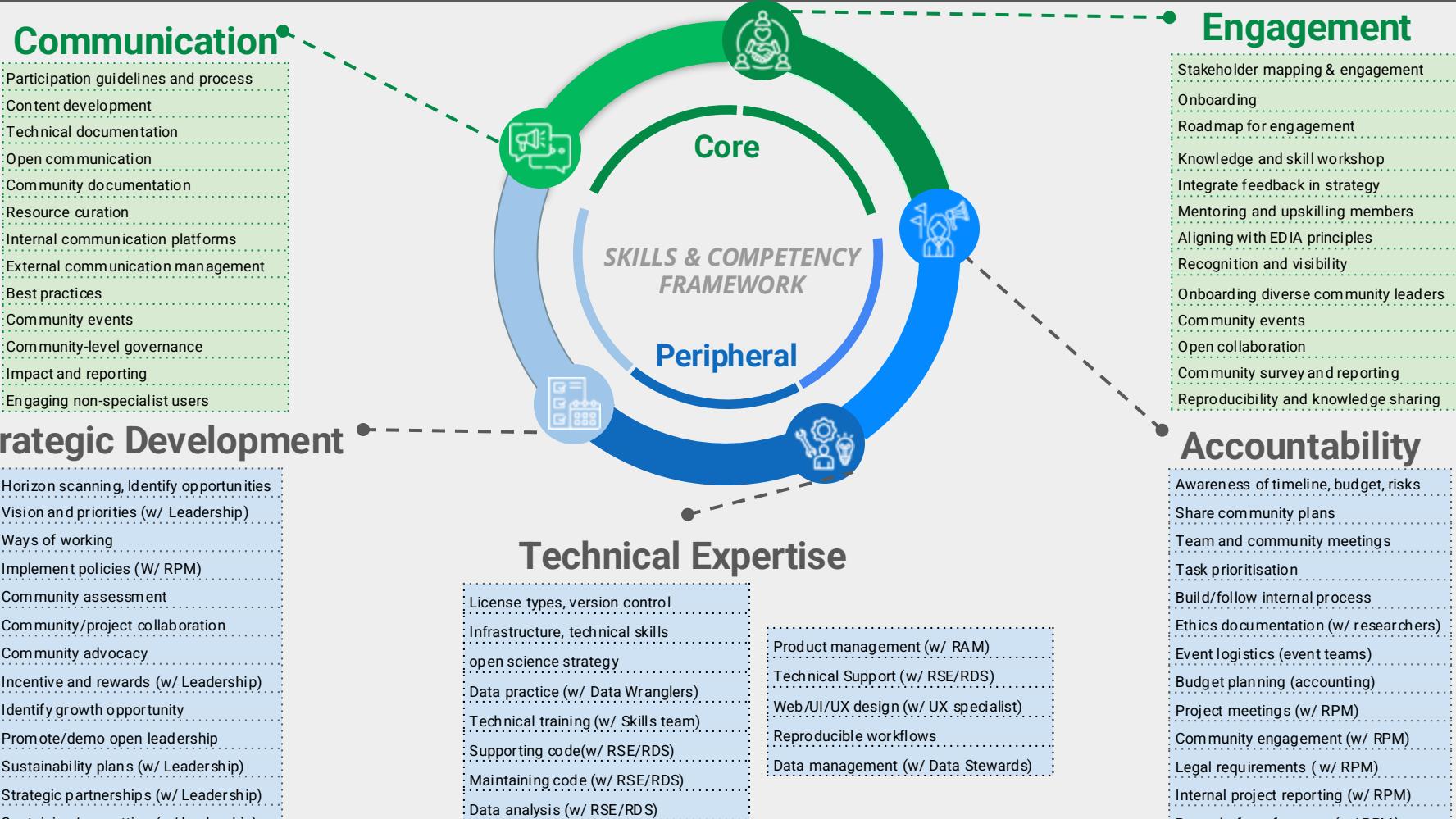
- Emphasises innovation and problem-solving
- Contributing to each others success
- Platform for co-creation, feedback, exchange

Community shapes the offering itself, and builds a sense of agency

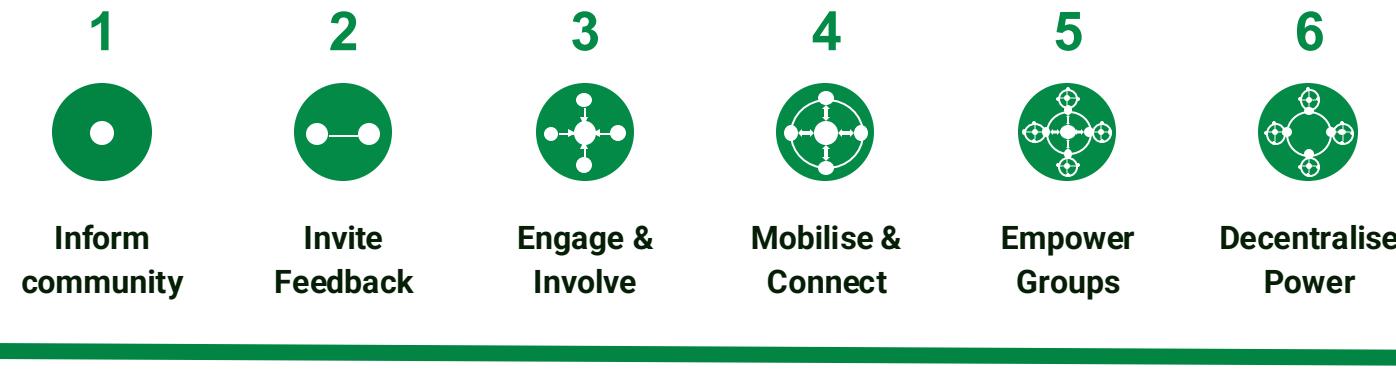
# Funnelling into Community Leadership



Mountain of Engagement, Chad Sansing, Abigail Cabunoc Mayes - Mozilla Open Leadership and OLS - Open Seeds, adapted by Cass Gould van Praag



# LEVELS OF PARTICIPATION



- Complexity of **potential problems** and community **members involved** in solving problems increases
- Scope of participation, diversity of perspectives and collaboration to solve problems improves
- Channels for engagement, **infrastructure** requirement and need for **resourcing** increases
- Peoples' involvement in community building, maintenance and sustainability increases
- Levels of participation can be used to **establish and improve objectives** (example: Y1, Y2, Y5)

# COMMUNITY MATURATION INDICATOR

*Examples of what community “engagement” looks like at different levels of participation*

