

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

The
Alan Turing
Institute



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.

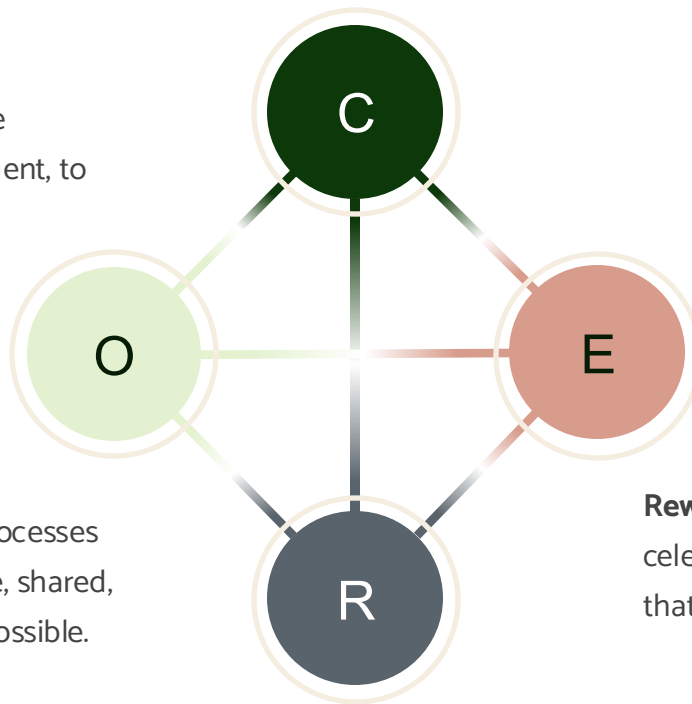


CC-BY 4.0 image by *The Turing Way* and Scriberia, Zenodo: <https://doi.org/10.5281/zenodo.3332807>.

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

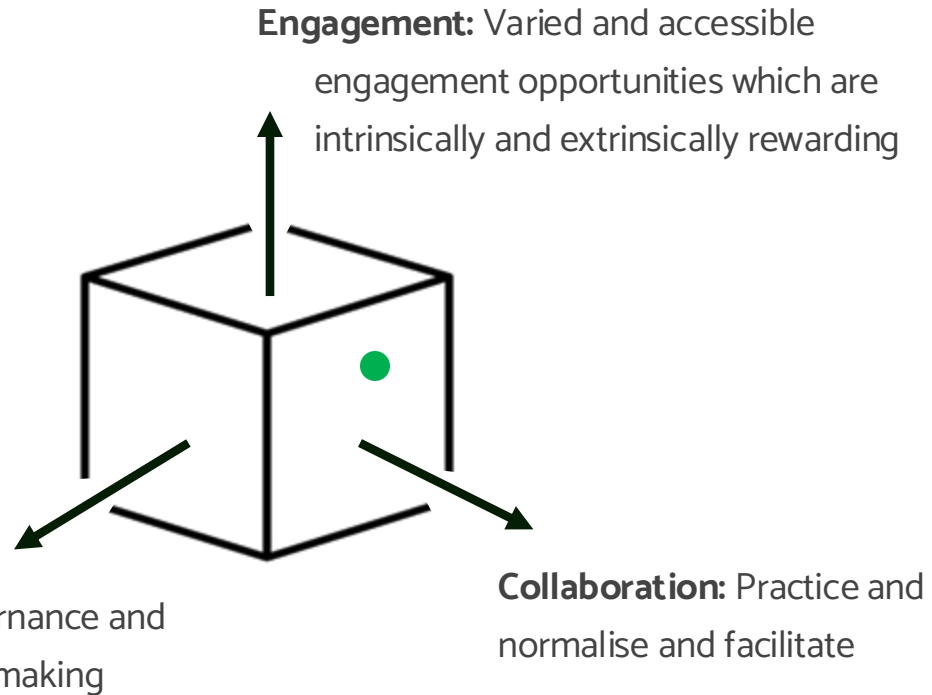
Intrinsic motivators

- 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.

EMPOWER

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.



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

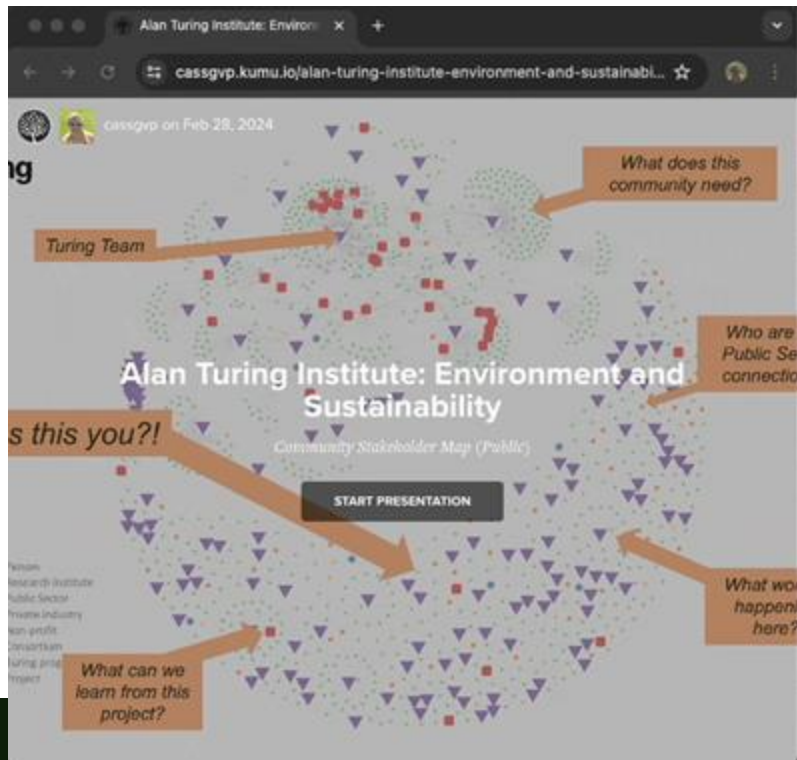


- **Calibrate:** Track engagement
- **Open:** Transparency and privacy mechanisms
- **Reward:** Attribution by default
- **Empower:** Reproducibility and decentralised contributions



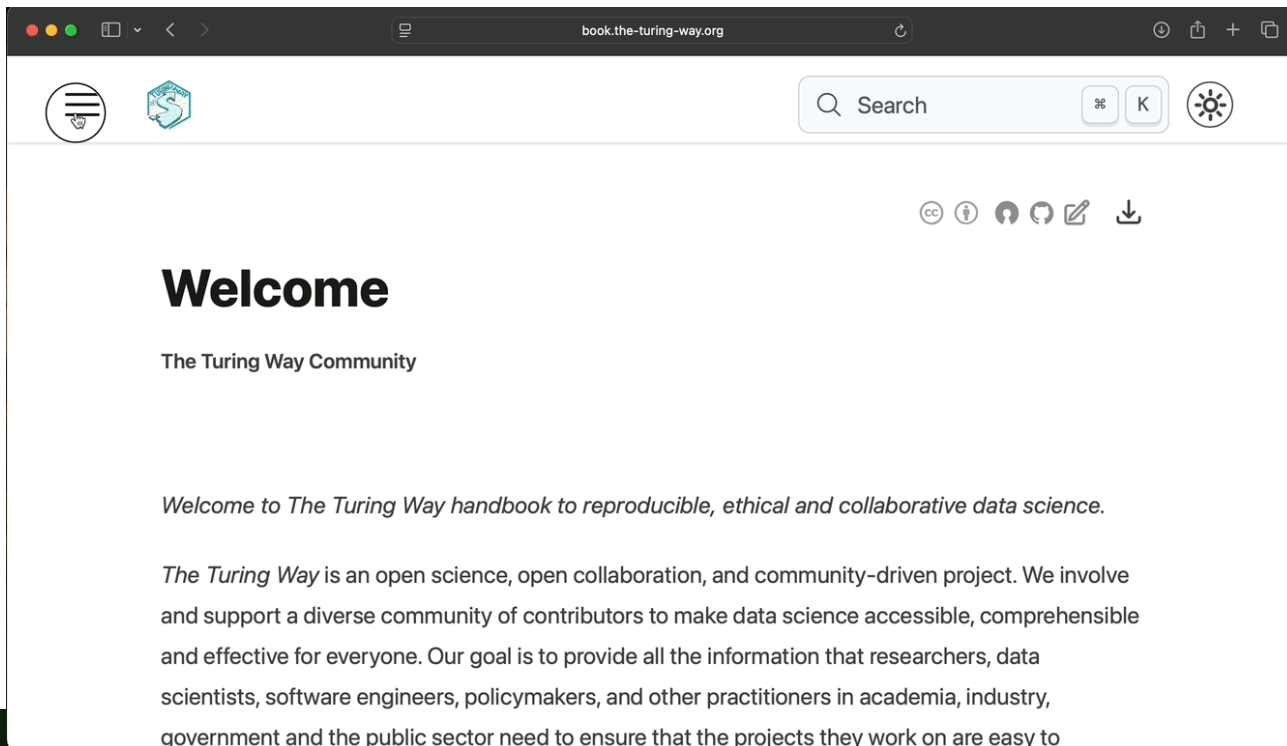
- **Calibrate:** Low-effort engagement
- **Open:** Public channels, open communication
- **Reward:** Celebrations and gratitude 🙏 🎉 ⭐
- **Empower:** Self organising

CORE Processes: Community Mapping

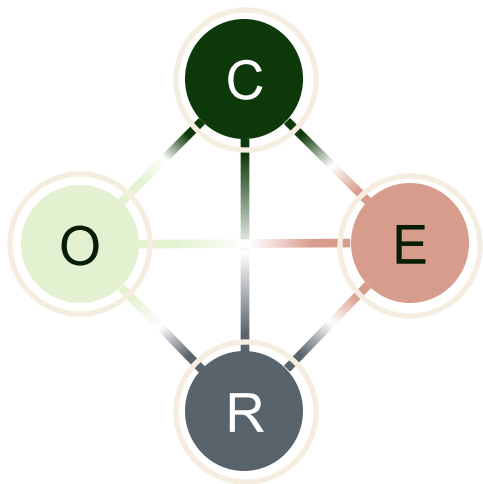


- Data held in SharePoint lists => Kumu.io
- github.com/rcmcooperative/community-mapping
- **Calibrate:** RDM about your community
- **Open:** Consented public maps
- **Reward:** Member visibility
- **Empower:** Information symmetry

CORE Processes: Documentation



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



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

<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

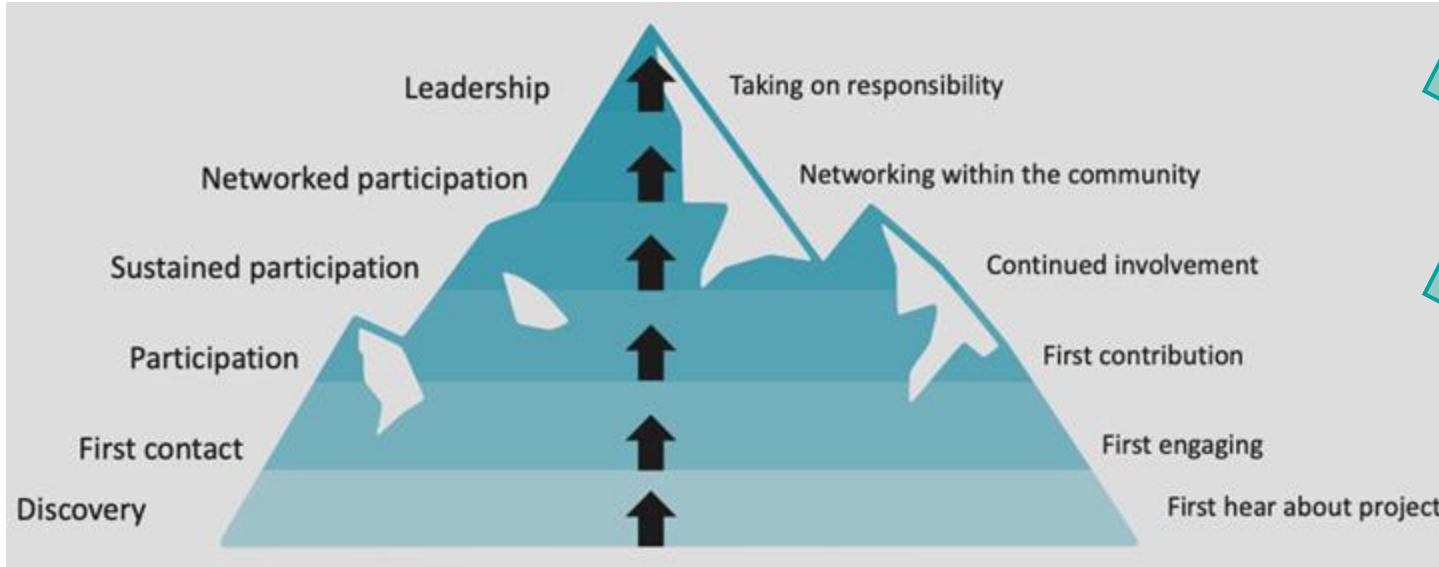
Community consumes the brand and advocates for it!

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



How do we make it sustainable and resilient?

Why would people come back?

How do we reach the right people?

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

Communication

- Participation guidelines and process
- Content development
- Technical documentation
- Open communication
- Community documentation
- Resource curation
- Internal communication platforms
- External communication management
- Best practices
- Community events
- Community-level governance
- Impact and reporting
- Engaging non-specialist users

Engagement

- Stakeholder mapping & engagement
- Onboarding
- Roadmap for engagement
- Knowledge and skill workshop
- Integrate feedback in strategy
- Mentoring and upskilling members
- Aligning with EDIA principles
- Recognition and visibility
- Onboarding diverse community leaders
- Community events
- Open collaboration
- Community survey and reporting
- Reproducibility and knowledge sharing

Accountability

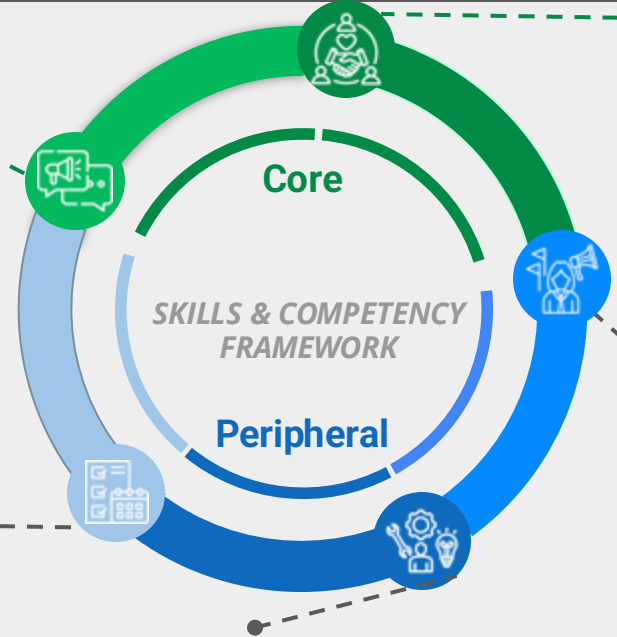
- Awareness of timeline, budget, risks
- Share community plans
- Team and community meetings
- Task prioritisation
- Build/follow internal process
- Ethics documentation (w/ researchers)
- Event logistics (event teams)
- Budget planning (accounting)
- Project meetings (w/ RPM)
- Community engagement (w/ RPM)
- Legal requirements (w/ RPM)
- Internal project reporting (w/ RPM)

Technical Expertise

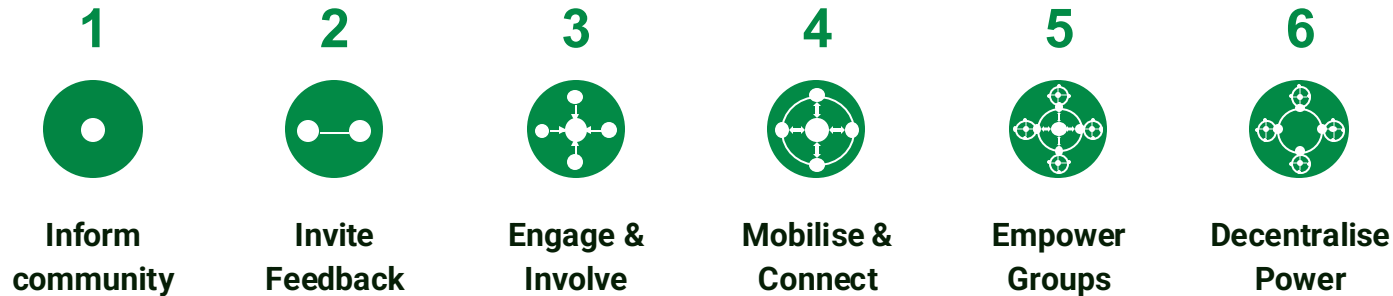
- License types, version control
- Infrastructure, technical skills
- open science strategy
- Data practice (w/ Data Wranglers)
- Technical training (w/ Skills team)
- Supporting code (w/ RSE/RDS)
- Maintaining code (w/ RSE/RDS)
- Data analysis (w/ RSE/RDS)
- Product management (w/ RAM)
- Technical Support (w/ RSE/RDS)
- Web/UI/UX design (w/ UX specialist)
- Reproducible workflows
- Data management (w/ Data Stewards)

Strategic Development

- Horizon scanning, Identify opportunities
- Vision and priorities (w/ Leadership)
- Ways of working
- Implement policies (w/ RPM)
- Community assessment
- Community/project collaboration
- Community advocacy
- Incentive and rewards (w/ Leadership)
- Identify growth opportunity
- Promote/demo open leadership
- Sustainability plans (w/ Leadership)
- Strategic partnerships (w/ Leadership)
- Sustainability (w/ Leadership)



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

