

PUBLIC KNOWLEDGE LEDGER

PKL

CORE DOCUMENT

Identity • thinking • principles • operation • governance

Knowledge should be traceable.

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A living reference for contributors, reviewers, moderators, partners, funders, researchers and the public.

Document status

This is PKL's unifying reference document. It explains the project's identity and connects its philosophical, technical and institutional parts in plain language. It is intended to guide decisions, onboarding, public explanation and future development.

It is a living document, not an immutable creed. Formal constitutional provisions, specifications, policies and recorded governance decisions should take precedence where they are more precise. Proposed ideas are labelled as direction rather than described as completed capability.

Document	Purpose	Authority
PKL Core Document	Shared identity, concepts and operating model	Interpretive, maintained openly
PKL Constitution	Mission, rights, duties and governance limits	Highest organisational authority
PKL Specification	Data structures, rules and technical behaviour	Technical authority
Policies and guides	Detailed moderation, security and operating procedures	Operational authority
Ledger and audit record	What was submitted, reviewed, changed and decided	Factual system record

1. PKL in one page

Public Knowledge Ledger (PKL) is an open, auditable system for recording claims together with the evidence, provenance, limitations, relationships, disagreement and review decisions that surround them.

PKL does not aim to manufacture certainty. It aims to make the condition of knowledge inspectable: what is claimed; why it is believed; which sources support or contradict it; how independent those sources really are; who assessed it; what remains uncertain; and how the record has changed.

PKL's core proposition is simple:

A conclusion becomes more trustworthy when its evidential path and decision history can be examined.

The identity

PKL is	PKL is not
A public record of claims and their evidential context	A machine that declares permanent truth
A system for traceable assessment and revision	A popularity vote or social-media feed
A place where uncertainty and disagreement remain visible	A repository that hides dissent to appear authoritative
A framework for accountable human review	An anonymous black box
Infrastructure that could serve many communities	An authority that must own every subject it records

The short public description

PKL records knowledge claims, the evidence behind them, their limitations and relationships, and the transparent review history that explains their current status.

2. Why PKL exists

Information is abundant, but the reasoning that turns information into accepted knowledge is often scattered, inaccessible or invisible. Sources repeat one another. Conflicts of interest are missed. Corrections disappear beneath newer pages. Disagreement is flattened into opposing slogans. A final label is displayed without the chain of evidence and judgement that produced it.

PKL exists to preserve that chain. It treats knowledge as a public process rather than a finished product.

The problem PKL addresses

- Claims circulate without stable identifiers or durable histories.
- Evidence is counted without checking whether apparently separate sources share the same origin, funder or dataset.
- Uncertainty and limitations are treated as weaknesses to hide rather than information to record.
- Assessments change, but the reasons for the change are rarely preserved in an accessible form.
- Authority can substitute for explanation, while public participation can lack disciplined review.
- Moderation decisions are often opaque, inconsistent or impossible to appeal.

The opportunity

PKL can provide a neutral evidential layer beneath articles, research summaries, public debate, education and policy. Its value is not that everyone must agree with a PKL assessment. Its value is that people can see enough of the record to understand, reproduce and challenge it.

3. How PKL thinks

Epistemic humility

Every assessment is made at a point in time from the material available to the ledger. PKL should say what the evidence presently warrants, not claim access to final truth.

Traceability before authority

A reader should be able to move from an assessment to its reasons, evidence, provenance, limitations and review history. Credentials can inform trust; they cannot replace an inspectable argument.

Evidence quality before evidence quantity

Ten repetitions of one weak source are not ten independent confirmations. PKL must consider methodology, source quality, transparency, relevance, bias risk and the relationships among evidence items.

Independence is a claim to test

Distinct URLs, publications or organisations do not necessarily represent independent evidence. Shared datasets, authors, laboratories, funding, ownership, supply chains or copied reporting may create correlation. PKL should describe this honestly as recorded provenance distinctness unless stronger independence has actually been established.

Disagreement is information

Contradictory evidence and minority interpretations should remain visible when relevant and responsibly supported. The goal is structured disagreement with reasons, not artificial consensus.

Revision is strength

A system that cannot change cannot learn. New evidence may strengthen, weaken, revise or overturn an assessment. Earlier states should remain auditable so change is explained rather than erased.

Human judgement must be accountable

Rules and software can organise evidence, identify relationships and enforce process. They cannot eliminate judgement. PKL therefore records who reviewed, what decision was made, why it was made and which interests or limitations may have affected it.

4. The PKL record

The atomic unit of PKL is not a webpage. It is a structured, versioned claim record.

Element	Question it answers
Claim ID	Which exact claim are we discussing?
Title and statement	What is being claimed, in testable and understandable terms?
Category and scope	Where does the claim apply, and where does it not?
Evidence	What material supports or contradicts the claim?
Evidence profile	How strong, relevant, transparent and bias-resistant is each item?
Provenance	Where did the evidence originate, and what depends on what?
Correlations and interests	Which sources may not be independent, and why?
Limitations	What is missing, uncertain or outside the assessment?
Relationships	Which other claims support, contradict, qualify or depend on this one?
Assessment status	What does the recorded evidence currently warrant?
Review history	Who decided what, when and for which stated reasons?
Versions	How has the record changed without losing its past?

Claim design

- One claim should express one main proposition.
- The wording should be specific enough to assess and broad enough to matter.
- Scope, population, time and relevant definitions should be explicit where ambiguity could change the assessment.
- Normative claims should be distinguished from empirical claims; value judgements cannot be converted into facts by evidence scoring.
- Composite claims should be divided when their parts could carry different evidence or statuses.

5. Evidence and provenance

PKL should evaluate evidence on more than presence or absence. A usable evidence profile may include methodology quality, source quality, sample or data strength, transparency, relevance, reproducibility, recency where material, bias risk, known correlations and conflicts of interest.

Evidence families

Items that derive from the same underlying source, dataset or evidential event should be connected as one provenance family. This reduces accidental double-counting. Provenance-family count is useful, but it is not a complete measure of epistemic independence or evidential weight.

A necessary safeguard

Known correlations and conflicts of interest must eventually affect assessment arithmetic or decision rules—not merely appear as a note after the status has already been calculated. Two disjoint provenance graphs funded by the same interested party may still require a discount, escalation or human review.

What automation may do

Automation may	Automation must not
Detect duplicate or derivative sources	Convert a crude count into an unqualified truth label
Map provenance relationships	Assume different identifiers prove independence
Flag missing fields and disclosed conflicts	Hide uncertainty behind a numerical score
Apply published consistency checks	Replace accountable reviewers in contested cases
Reproduce deterministic assessments	Silently change rules or historical outcomes

6. Assessment language

Statuses should be descriptive, explainable and reversible. Their definitions belong in the formal specification; the conceptual model below expresses the intended meaning.

Status	Plain-English meaning
Unassessed	Recorded but not yet through an adequate review.
Uncertain	Available evidence is insufficient, weak, closely balanced or materially incomplete.
Supported	The recorded evidence presently supports the claim under the published standard.
Disputed	Material contradiction or unresolved disagreement prevents a single supported conclusion.
Established	Strong, diverse and mature evidence supports the claim, with remaining limitations recorded.
Superseded	A later record or formulation has replaced this version without deleting its history.
Withdrawn	The record remains visible but is no longer presented as an active assessment.

No status should stand alone. The interface should expose the evidence level, decisive reasons, limitations, dissent, date, rule version and reviewer record needed to interpret it.

7. The claim lifecycle

1. Submission — a contributor proposes a clear claim with evidence, limitations and relevant relationships.
2. Intake — the system validates required fields, safety constraints and basic record integrity.
3. Triage — a moderator checks scope, duplication, obvious abuse and the expertise needed for review.
4. Evidence review — reviewers examine relevance, quality, provenance, correlations, conflicts and contradictions.
5. Decision — the claim is accepted, returned for revision, rejected with reasons, or escalated.
6. Publication — the accepted record receives a stable public identity and a visible assessment history.
7. Challenge and appeal — contributors or readers may present a reasoned correction, new evidence or procedural concern.
8. Revision — the record changes through a versioned event; prior states and reasons remain available.
9. Periodic review — time-sensitive or contested claims are reconsidered under a published schedule or trigger.

Publication is not the end of the process. It is the point at which the record becomes publicly accountable.

8. Review and moderation

Different roles

Role	Primary responsibility	Must not
Contributor	Submit claims and supporting context	Publish directly into the authoritative ledger
Triage moderator	Check eligibility, duplication, conduct and routing	Make specialist evidence decisions beyond competence
Reviewer	Assess evidence and explain a recommendation	Review material where an unmanaged conflict exists
Senior reviewer	Resolve difficult cases and check consistency	Override the record without reasons
Appeals panel	Review process or assessment challenges	Simply repeat the original decision without independent consideration
Steward/Council	Maintain rules, appointments and institutional integrity	Direct individual findings for political or commercial convenience
System	Validate, record, reproduce and expose events	Conceal rule changes or impersonate human judgement

Reviewer standard

- Read the claim as written, not as a stronger or weaker claim imagined by the reviewer.
- Distinguish evidence against a claim from absence of evidence for it.
- Record decisive reasons in language an informed non-specialist can follow.
- Declare relevant financial, organisational, intellectual and personal interests.
- Recuse where a conflict cannot be managed transparently.
- Represent credible disagreement fairly, including disagreement with the reviewer's own conclusion.
- Avoid prestige bias: assess the work, while recording source context honestly.

Moderation principles

Moderation protects the integrity of participation; it must not become viewpoint control. Rejection should be based on published criteria such as illegality, abuse, duplication, non-assessable wording, missing minimum information, fabricated material or clear departure from scope. Controversial content requires stronger process, not silent disappearance.

9. Transparency and audit

PKL should make important actions reconstructable. Every consequential event needs an identity, timestamp, actor or accountable system process, action type, affected record, stated reason, and connection to the previous state.

Public by default

- Published claim records and their versions
- Evidence citations and provenance relationships, subject to lawful access limits
- Assessment rules and rule versions
- Reviewer decisions, reasons and declared interests
- Corrections, appeals and outcomes
- Governance decisions, appointments and policy changes
- Aggregate performance measures such as queue size and review time

Protected where necessary

Transparency is not indiscriminate disclosure. Personal data, security credentials, confidential reports, legally restricted material and information that creates a credible safety risk require proportionate protection. Any redaction should be recorded with a reason and, where possible, a review or expiry date.

Tamper evidence

A ledger should make undetected rewriting difficult. Hash-linked events, deterministic replay, signed releases, backups and independent mirrors can strengthen confidence. These mechanisms prove record integrity; they do not prove that the recorded assessment is correct.

10. Governance and independence

PKL's legitimacy must come from constrained, visible process rather than the authority of a founder, funder, company, government or technical operator.

Governance principles

- Mission lock — governance cannot quietly convert PKL into a persuasion or surveillance system.
- Separation of powers — funding, technical operation, moderation and appeals should not rest with one unchecked actor.
- Published rules — substantive standards and changes are open to inspection.
- Reasoned decisions — important choices include their rationale and dissent.
- Conflict management — interests are declared, recorded and acted upon.
- Appeal and correction — no person or status is beyond challenge.
- Community succession — PKL must be capable of continuing beyond its founder and initial builders.

Suggested institutional structure

Body	Function
PKL operating organisation	Employs staff, maintains services and administers day-to-day work.
Independent standards council	Guards the constitution, assessment framework and major policy changes.
Reviewer community	Conducts and improves domain review under common standards.
Appeals and ethics panel	Handles contested decisions, conflicts and procedural complaints.
Public contributors	Submit claims, evidence, corrections and governance feedback.

The eventual legal form—private company, social enterprise, charity, foundation or hybrid—should be selected against mission protection, funding access, accountability, tax, investment needs and operational freedom. Legal ownership must not equal epistemic ownership.

11. Sustainability without capture

PKL needs reliable income to remain independent. The governing test is whether a revenue source buys service or influence. Nobody should be able to purchase a status, suppress contradictory evidence, select a favourable reviewer or secretly change assessment rules.

Compatible revenue possibilities

- Grants and philanthropic support with disclosed terms and diversified dependency
- Institutional subscriptions for advanced tools, integrations or service levels while core public records remain accessible
- APIs, provenance analysis and verification services
- Research, training, audits and standards implementation
- Hosted private or sector-specific ledgers that preserve PKL integrity rules
- Memberships, donations and aligned sponsorship with a visible firewall from editorial decisions

Non-negotiable funding safeguards

- Publish significant funders and material conditions.
- Prevent funders from directing individual assessments.
- Diversify income and disclose dangerous concentration.
- Record related-party transactions and reviewer conflicts.
- Maintain a public-interest continuity plan if funding is withdrawn.

12. Participation and community

PKL should be understandable and usable by more than specialists. Expertise matters, but expertise takes many forms. A healthy reviewer community can include researchers, practitioners, journalists, librarians, engineers, educators and people with relevant lived experience, provided their role and evidential basis are clear.

Rights of participants

- To understand the rules that affect their contribution
- To receive reasons for consequential moderation and review decisions
- To correct honest mistakes and challenge decisions through a defined route
- To have personal data handled proportionately
- To see relevant conflicts and changes to the record

Responsibilities of participants

- Submit material honestly and cite sources accurately
- Separate fact, interpretation and value judgement
- Disclose relevant interests and relationships
- Engage with disagreement without harassment or manipulation
- Correct the record when a material error becomes known

13. Technology and system integrity

The technology should serve the epistemic model. The data model, API, interface and audit mechanisms must preserve the distinctions PKL claims to value.

Design requirements

- Stable identifiers and explicit schemas
- Append-oriented, reconstructable event history
- Deterministic replay of published assessment rules
- Clear separation between submissions, reviewed records and public publication state
- Role-based access and secure reviewer authentication
- Validated inputs, safe outputs, backups and recovery testing
- Portable exports and open interfaces to resist platform lock-in
- Accessible public presentation on mobile and desktop
- Observability that detects failure without collecting unnecessary personal data

AI within PKL

AI may assist with structure, summarisation, duplication detection, source mapping, missing-field checks and reviewer workload. AI output must remain attributable, reviewable and contestable. An AI system should not become an unaccountable final authority, and generated citations must never be treated as evidence without verification.

14. What success looks like

PKL succeeds when people can rely on the process without needing personal trust in its founders or operators.

Dimension	Evidence of progress
Integrity	Records replay correctly; unauthorised changes are detectable; backups recover.
Quality	Reviews cite reasons, account for provenance and improve after challenge.
Independence	Conflicts affect assignments and decisions; funding is diversified and disclosed.
Participation	Contributors receive timely, understandable outcomes; reviewer capacity grows.
Transparency	Policies, decisions, versions and performance measures are accessible.
Usefulness	People and institutions use PKL records to understand or verify real questions.
Resilience	PKL can continue through staff, funding or leadership changes.

Measures to publish

- Submission volume, queue age and median time to first decision
- Acceptance, revision, rejection and appeal outcomes with careful context
- Reviewer participation, domain coverage and recusal rates
- Corrections, overturned decisions and time to correction
- Provenance completeness and disclosed-correlation coverage
- Funding concentration and operating runway
- System availability, recovery tests and material incidents

15. Development priorities

PKL should grow through demonstrable trust, not feature accumulation.

Horizon	Priority
Now	Stabilise submission storage, reviewer access, moderation, audit events and reliable production deployment.
Next	Recruit founding reviewers; publish reviewer guidance; test end-to-end claim handling; notify contributors.
Then	Make evidence profiles and conflicts load-bearing; add appeals, version history and public audit views.
Institutional	Formalise governance, legal structure, funding safeguards and independent oversight.
Scale	Expand domains carefully, expose interoperable APIs, support independent mirrors and partnerships.

Readiness gates

- Do not scale submissions before review capacity and queue transparency exist.
- Do not advertise automated assessment as robust until evidence quality and correlation affect outcomes.
- Do not claim institutional independence before governance and funding controls are operational.
- Do not treat a successful deployment as proof of a trustworthy knowledge process.

16. PKL voice and identity

PKL should sound calm, exact, curious and honest. It can be ambitious without grandiosity, rigorous without becoming inaccessible, and transparent without overwhelming people with internal machinery.

Prefer	Avoid
"The recorded evidence presently supports..."	"PKL has proved the truth..."
"This assessment has these limitations..."	"Experts agree, therefore..."
"These sources share a recorded provenance family..."	"There are five independent sources..." without verification
"The decision was revised because..."	Quietly replacing an earlier conclusion
"We do not yet know."	A confident label unsupported by the record

Identity statement

PKL is public-minded, evidence-led, revision-friendly and accountable by design. It respects expertise but asks for reasons. It welcomes participation but protects disciplined review. It records disagreement without surrendering the possibility of judgement. It seeks durable trust through traceability.

Motto

Knowledge should be traceable.

17. Decision test

When PKL faces a product, policy, funding or governance choice, ask:

10. Does this make a claim and its evidence easier to trace?
11. Does it preserve uncertainty, disagreement and revision honestly?
12. Does it improve accountability for human and automated decisions?
13. Does it protect independence from funders, founders, operators and major participants?
14. Can the rule be explained publicly and applied consistently?
15. Can a reasonable person challenge or appeal the result?
16. Would the decision still be defensible if all relevant relationships were visible?

If the answer to several of these questions is no, the choice is probably moving PKL away from its identity.

18. Glossary

Term	Meaning in PKL
Assessment	A reasoned judgement about what the recorded evidence currently warrants.
Audit trail	The ordered record of actions, actors, times, reasons and state changes.
Claim	A defined proposition capable of being examined, qualified or related to evidence.
Conflict of interest	An interest or relationship that could reasonably affect or appear to affect judgement.
Correlation	A relationship that reduces confidence that evidence items are independent.
Evidence family	Items connected through a recorded common provenance origin or dependency.
Evidence profile	Structured information about the quality, relevance, transparency and risks of an evidence item.
Ledger	The durable, reconstructable record of claims and consequential events.
Limitation	A boundary, uncertainty, omission or weakness necessary to interpret an assessment.
Moderator	A person responsible for process integrity, eligibility, conduct or routing.
Provenance	The origin, custody, transformation and dependency history of information or evidence.
Reviewer	An accountable person who examines evidence and records a reasoned recommendation or decision.
Version	A preserved state of a record linked to what changed and why.

Closing declaration

PKL begins from a modest observation: people deserve to see how knowledge claims earn their standing. From that follows a demanding commitment—to preserve evidence, expose provenance, acknowledge limits, record disagreement, explain decisions and remain willing to change.

The ledger is not valuable because it is permanent. It is valuable because its history is durable while its understanding is allowed to improve.

*PKL lives when its process can be inspected, challenged
and carried forward by people beyond its creators.*

— Public Knowledge Ledger, Core Document v1.0