# Oikoi Data Governance Framework

*Data governance principles and lifecycle across Methodologies E, S and W*

**Oikoi Soluciones Tecnológicas**
**Technical Framework | 2026**

**1. Purpose**

Oikoi develops analytical methodologies designed to transform information about human and organizational populations into evidence that supports interpretation and decision-making.

This Data Governance Framework describes the principles and operational practices currently identifiable across three complementary methodologies:

**Methodology E**, applied through ECOO, for organizational population scanning and multi-perspective analysis.

**Methodology S**, applied through StayLab, for the analysis of factors associated with employee permanence and resignation across demographic and organizational profiles.

**Methodology W**, applied through Voz Viva, for protected collection and treatment of qualitative voice and textual evidence.

The Framework does not present the three methodologies as technically identical. Each one generates and processes different types of information. Its purpose is to identify the common governance logic through which Oikoi seeks to ensure that data are collected for defined purposes, processed with methodological discipline, protected from unnecessary identification, and transformed into aggregated or contextualized intelligence.

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**2. Governance approach**

Oikoi's approach to data governance is based on a distinction between **data collection** and **analytical purpose**.

The methodologies are not designed primarily to accumulate personal information. They are designed to understand patterns, differences, risks, perceptions and experiences within populations.

This distinction is particularly explicit in Methodology E, where the unit of analytical interest is the organization as a collective population rather than the individual respondent. Results are interpreted as aggregated evidence and are not intended to generate individual performance profiles. ECOO_Borrador_Tecnico_v0.1

Across the three methodologies, the emerging governance model can be summarized through seven principles:

1. **Purpose limitation**

2. **Data minimization**
3. **Separation of operational and analytical data**
4. **Quality and methodological traceability**
5. **Protection of individual identity**
6. **Aggregation and contextual interpretation**
7. **Transformation of data into actionable intelligence**

These principles are implemented differently depending on the nature of the data processed by each methodology.

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**3. Methodological data ecosystem**

| Methodology | Current application | Main evidence type | Main analytical purpose |
|---|---|---|---|
| **Methodology E** | ECOO | Structured organizational population data | Identify collective patterns, divergences, strengths and diagnostic priorities |
| **Methodology S** | StayLab | Structured demographic and organizational data | Identify retention levers and resignation risks across population segments |
| **Methodology W** | Voz Viva | Voice, transcription and qualitative comments | Enable protected listening and analysis of qualitative organizational evidence |

Together, the three methodologies provide complementary analytical capabilities:

**E** identifies where relevant patterns or tensions appear.

**S** identifies how factors vary across population profiles and how they relate to permanence or resignation.

**W** captures qualitative evidence that can help contextualize, deepen or challenge structured findings.

This enables Oikoi to work with both structured and unstructured information without assuming that one data source alone provides a complete representation of organizational reality.

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**4. Data lifecycle**

Oikoi's emerging governance framework can be represented through the following lifecycle:

**purpose definition → data capture → operational control → quality control → transformation and processing → aggregation or anonymization → analysis → interpretation → reporting → retention or removal according to methodological function**

Each phase carries different governance requirements.

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**4.1 Purpose definition**

Before data collection, each methodology defines a specific analytical purpose.

Methodology E is designed to identify collective organizational patterns rather than individual profiles. ECOO_Borrador_Tecnico_v0.1

Methodology S structures information around the identification of retention factors and resignation risks.

Methodology W is designed to allow participants to provide qualitative evidence while reducing unnecessary exposure of identity.

This purpose-first logic limits the tendency to collect data simply because they are technically available.

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**5. Data minimization**

**Methodology E**

Methodology E limits the role of identifiable operational information.

During fieldwork, an alphanumeric identifier associated with the connection origin is used solely to manage coverage and reduce repeated presentation of the same component. The IP address itself is not retained as analytical information and is not stored in the definitive analytical database.

The operational identifier is removed before construction of the final analytical dataset. ECOO_Borrador_Tecnico_v0.1

The mechanism is not interpreted as a unique individual identity and is not used to reconstruct individual longitudinal profiles.

This constitutes a practical separation between:

**operational control data** and **analytical evidence**.

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**Methodology W**

Methodology W applies a stronger form of data minimization because its purpose is protected organizational listening.

The documented frontend does not request:

- name;
- email;
- telephone number;
- employee number;
- position;
- organizational area;
- or location.

The original audio is retained only temporarily in browser memory while processing takes place. The user-facing workflow works with the processed transcription and a neutralized audio version.

This makes Methodology W a particularly useful example of **privacy-oriented system design**, because unnecessary identity attributes are avoided at the point of collection rather than removed only at the reporting stage.

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**Methodology S**

Methodology S uses demographic and organizational variables because population segmentation is intrinsic to its analytical purpose.

Current documented variables include age, gender, marital status, educational level, economic dependents, hierarchical level and seniority.

These variables permit cohort analysis, but their use also creates a governance requirement: combinations of demographic attributes can reduce the effective size of a subgroup.

For that reason, the current analytical dashboard reports the active sample size and an associated confidence indicator when filters are applied.

A formal rule for minimum reporting group size has not yet been documented and should therefore be considered an area for further governance formalization.

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**6. Data quality**

Data governance at Oikoi is not limited to privacy. It also includes the quality and interpretability of the information used for decision-making.

**Methodology E**

Methodology E uses explicit mechanisms for coverage and response-quality control.

Its adaptive logic prioritizes domains, components and perspectives with lower levels of coverage rather than requiring each participant to complete the full analytical matrix. ECOO_Borrador_Tecnico_v0.1

The methodology also distinguishes between a substantive unfavorable response and **"I do not know"**, treating the latter as lack of sufficient information rather than as a neutral judgment. ECOO_Borrador_Tecnico_v0.1

Behavioral controls modify the weight of responses when unusual temporal or repetitive selection patterns appear. These controls are explicitly not interpreted as measures of truthfulness or sincerity. ECOO_Borrador_Tecnico_v0.1

This is a relevant governance principle: **quality-control rules should regulate analytical weight without generating unsupported judgments about individuals**.

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**Methodology S**

Methodology S uses a structured database and predefined analytical transformations.

The current StayLab technical documentation describes records containing:

- methodological layer;
- response type;
- demographic attributes;
- organizational attributes;
- and factor scores.

The analytical engine calculates averages by factor and population selection and derives a gap between permanence and resignation forces.

The system then orders factors according to analytical relevance.

This provides traceability from structured observations to calculated indicators and finally to decision-support outputs.

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**Methodology W**

Methodology W applies a staged processing workflow:

**audio capture → transcription → voice neutralization → participant review/confirmation → comment registration → analytical classification**

The current technical structure also allows the recording of:

- comment status;
- sensitivity;
- tags;
- analyst observations;
- anonymized version;
- and history.

These fields create the basis for controlled qualitative data management and subsequent auditability of analytical treatment.

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**7. Identity protection and anonymization**

The three methodologies require different protection strategies because the risk of identification differs substantially.

**Methodology E**

Protection is achieved primarily through:

- aggregate interpretation;
- separation of operational identifiers from analytical data;
- non-retention of IP addresses in the final database;
- and elimination of the operational identifier before definitive analysis. ECOO_Borrador_Tecnico_v0.1

**Methodology W**

Protection begins before analytical processing through minimization of identifying data and transformation of the original voice.

Its documented data structure also contains a dedicated **anonymized version** field, enabling analysts to separate the original content from a version suitable for broader interpretive use.

**Methodology S**

The principal privacy challenge is not direct identification by name but possible **re-identification through small demographic combinations**.

The current system already exposes active sample size to the analyst, but a formal threshold preventing analysis or reporting of excessively small groups has not yet been documented.

This should be formalized before Methodology S is described as possessing a complete demographic disclosure-control protocol.

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**8. Access control**

Methodology W provides the clearest documented example of technical access control.

Its current API architecture uses authenticated access through Bearer tokens. Configuration documentation also specifies that credentials should not be included in public repositories.

This constitutes operational access control but should not be represented as a complete information-security architecture.

At present, the available documentation does **not** establish a comprehensive organization-wide policy covering matters such as:

- encryption at rest;
- formal user-access matrices;
- periodic access reviews;
- incident-response procedures;
- or centralized credential governance.

These should therefore remain outside any claim made to UNFPA unless subsequently documented.

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**9. Analytical aggregation**

Oikoi methodologies are oriented toward population-level interpretation rather than individual judgment.

In Methodology E, weighted observations are progressively aggregated from response level to formulation, component, perspective and analytical domain. ECOO_Borrador_Tecnico_v0.1

The methodology gives particular attention to convergence and divergence between perspectives, preventing a single organizational average from concealing differentiated experiences.

Methodology S aggregates and compares data across factors and population segments.

Methodology W transforms individual qualitative contributions into analyzable themes, patterns and contextual evidence.

The governance principle common to the three methodologies is therefore:

**individual evidence enters the analytical process, but decision support should be based primarily on patterns rather than on exposure of individual respondents.**

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**10. Integration of heterogeneous evidence**

One of Oikoi's main analytical capabilities is the integration of different forms of evidence.

Methodology E explicitly recognizes that structured findings often require qualitative contrast in order to understand context, manifestations and possible explanations. ECOO_Borrador_Tecnico_v0.1

This makes Methodology W particularly complementary to E.

A quantitative finding may indicate that a particular organizational condition requires attention. Qualitative evidence can then:

- confirm the pattern;
- provide contextual detail;
- reveal variation hidden by aggregation;
- challenge the initial interpretation;
- or identify an issue absent from the structured instrument.

Methodology S adds another analytical layer by identifying differences among population profiles.

Together, E, S and W allow Oikoi to combine:

**measurement + segmentation + protected qualitative listening.**

This is the basis of a broader analytical architecture in which data sources are complementary rather than interchangeable.

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**11. From data to intelligence**

Oikoi does not regard data visualization as the final product of the analytical process.

The intended sequence is:

**data → structured information → interpretation → priorities → recommendations → organizational action**

Methodology E identifies diagnostic signals and perceptual differences.

Methodology S identifies factors with the greatest potential influence on permanence and resignation.

Methodology W contributes lived experience and contextual meaning.

The analytical objective is therefore not merely to describe populations, but to produce **decision-relevant intelligence while preserving uncertainty and methodological limits**.

This distinction is particularly important in complex institutional environments, where data do not automatically determine the meaning of a situation or the appropriate response.

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**12. Transparency and methodological boundaries**

Oikoi's emerging governance approach includes explicit recognition of methodological limitations.

The Methodology E technical documentation states that ECOO does not yet possess comprehensive psychometric validation of its full architecture and that certain areas of version control, custody, fieldwork closure and documentary governance remain under institutional formalization. ECOO_Borrador_Tecnico_v0.1

This distinction between **operational practice** and **future formalization** should apply across the entire Oikoi governance framework.

A governance document should not turn planned improvements into retrospective claims.

Accordingly, this Framework distinguishes three categories:

**Documented and operating**
Practices supported by current technical documentation or system behavior.

**Operating but requiring stronger institutional documentation**
Practices known to occur operationally but not yet expressed through a complete formal policy.

**Planned or recommended**
Governance mechanisms that should be developed but must not be represented as currently operational.

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**13. Current governance maturity matrix**

| **Governance dimension** | **Methodology E** | **Methodology S** | **Methodology W** |
|---|---|---|---|
| Purpose limitation | **Documented** | **Documented** | **Documented** |
| Data minimization | **Documented operationally** | **Partial** | **Strongly documented** |
| Separation of operational and analytical data | **Documented** | **To formalize further** | **Partially documented** |
| Quality control | **Strongly documented** | **Documented analytically** | **Process documented** |

| Governance dimension | Methodology E | Methodology S | Methodology W |
|---|---|---|---|
| Anonymization / identity protection | **Documented operationally** | **Requires subgroup rules** | **Strong design evidence** |
| Aggregation | **Strongly documented** | **Documented** | **Analytical process requires further formalization** |
| Access control | **Needs further documentation** | **Needs further documentation** | **Technical authentication documented** |
| Retention and deletion | **Partial** | **Not yet sufficiently documented** | **Data model recognizes retention status; policy requires formalization** |
| Version control and traceability | **Formalization underway** | **Needs formalization** | **History structure documented; governance rules need formalization** |
| Reporting safeguards | **Aggregation principle established** | **Minimum subgroup rule needed** | **Anonymized-version mechanism available** |

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**14. Areas for continued formalization**

The current practices already provide a meaningful foundation for data governance. However, a mature organization-wide framework should formalize several areas that the existing evidence does not yet fully establish.

Priority areas include:

- explicit institutional roles and responsibilities for data governance;
- formal access-control matrices;
- standard retention and deletion periods;
- incident-response procedures;
- formal consent and participant-information protocols;
- minimum subgroup thresholds for demographic reporting;
- version-control and change-management procedures;
- standardized closing protocols for fieldwork;

- and consistent documentation of anonymization and analytical transformation.

These should be understood as **governance development priorities**, not as deficiencies to conceal.

Their formalization would convert existing technical practices into a more explicit institutional system.

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**15. Relevance for institutional intelligence systems**

The combined experience of Methodologies E, S and W demonstrates an applied capacity to design systems in which data governance is connected directly to analytical usefulness.

Oikoi's experience spans:

**structured population capture; adaptive data collection; demographic segmentation; qualitative voice collection; operational privacy safeguards; quality controls; aggregation; multi-source interpretation; and transformation of evidence into decision-support outputs.**

This experience is particularly relevant to institutional intelligence environments in which information must be both **technically useful and responsibly governed**.

The central principle is that better intelligence does not require unrestricted accumulation of data.

It requires collecting the **right information**, for a **defined purpose**, under **transparent methodological rules**, and transforming it into evidence at the appropriate level of aggregation and interpretation.

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**Governance principle**

**Oikoi seeks to maximize the interpretive value of population data while minimizing unnecessary exposure of the people from whom those data originate.**

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**Status note**

This Framework consolidates currently documented practices from Methodology E, Methodology S and Methodology W. It is intended as an institutional technical profile rather than as a legal privacy policy or cybersecurity certification.

Where operating practices have not yet been fully formalized through institutional documentation, the text identifies them as areas for continued development rather than representing them as completed governance mechanisms.