



EIXO 2 – COMPETÊNCIAS E HABILIDADES DO AUDITOR DO FUTURO

SOCIAL DATA FOR IMPACT AUDITING: A STRATEGY TO LEAVE NO ONE BEHIND

Leonardo Visconti Cox

Auditor of the Spanish Court of Audit. Subdirector Adjunto. Departamento 4º de Fiscalización, del Sector Público Fundacional y Empresarial, y Otros Entes Estatales. Tribunal de Cuentas (en adelante TCU).

1. ABSTRACT

This study proposes a transformative and impact-oriented auditing model, based on a data-driven approach that leverages social data throughout the audit cycle by eight strategic dimensions. Supreme Audit Institutions (SAIs) and Regional Audit Institutions (RAIs) are positioned as agents of social change and public data producers, contributing to the Sustainable Development Goals (SDGs) established in the United Nations 2030 Agenda, in line with INTOSAI-P12 on making a difference in citizens' lives, from current and future generations. By strengthening the role of citizen-generated data through the application of data science tools across all phases of the audit process and converting audit outputs into high-value and reusable data products, this model enhances transparency, accountability, and inclusiveness, with the goal of **“Leave No One Behind”**, contributing to the development of the **Social Return of Public Audit (SRPA)** making a paradigm shift in how audit institutions can create measurable and people-centred impact grounded in knowledge and guided by social purpose to strengthen public governance by identifying areas of improvements.

Keywords: Citizens – Data-driven – Leave No One Behind – Social Return of Public Audit

2. MOTIVATION OF THE STUDY



SAIs and RAIs are shaping the future of public auditing as agents of social change, capable of generating real and measurable impact through the processing and production of data. This study proposes a data-driven approach, people-centred approach and committed to inclusiveness, placing **social data** at the core of the model, strengthened by **data science approach**, to ensure that public audit contributes to **Leave No One Behind**, by prioritizing those who are most vulnerable and marginalized, contributing to eradicate poverty, ending discrimination and exclusion, and reducing inequalities. Through this perspective, audit reports guide and support the implementation of public policies and measures that improve the quality of life of citizens and promote the sustainable development of societies, for the development of present and future generations.

3. METHODOLOGY OF THE STUDY

The methodology of this study consists in developing a conceptual framework focused on integrating the principle of **Leave No One Behind** into the core of SAIs' and RAIs' data strategies, positioning them as agents of social change and active components within their respective data ecosystems, with a leading perspective. The proposed model brings together the principles of people-centred auditing through eight key dimensions, such as the use of data science tools and the generation of reusable open data, and with focus in the social audit return of public audit. It is aligned with the **SDGs** and the **INTOSAI-P12** principles, serving as a foundation to strengthen social impact and enhance public governance.

4. RESULTS

Strategic Dimensions for a Data-Driven, Inclusive-Oriented Public Audit Model

The model of this study is visually summarized through the "**Leave No One Behind Audit Circle**", which integrates eight strategic dimensions around a



central principle that represents a transformative approach to public audit, grounded in inclusion, data innovation, and social impact. These dimensions articulate a comprehensive vision that includes data science, open data, standardization, and impact-oriented evaluation. At its core, the model guides SAIs and RAIs toward more accessible, relevant, and equity-focused audits. This framework fosters inter-institutional collaboration, promotes data openness, and enables the measurement of audit outputs, outcomes, and impacts through SRPA and the exchange of audit-based knowledge using parameterized tools.

Leave No One Behind Audit Circle



One core principle, eight key dimensions for inclusiveness.

1. Targeted Outreach Based on "Leave No One Behind" (LNOB):

The audit cycle is redefined through an inclusiveness-responsive lens, with a Cross-Cutting Lab of Inclusiveness which analyses disaggregated data to prioritize the most vulnerable populations as key stakeholders. This ensures that audit engagements actively tackle inequality, and marginalization, in alignment with the SDGs. According to the author's proposed framework, this Cross-Cutting



Lab₁ can be activated within a system of specialized labs (data, social, public policy evaluation), working as a transversal layer of impact. Its effectiveness depends on the SAI's ability to synchronize data analysis and public policy evaluation. Furthermore, this **Cross- Cutting Lab** guides audit units to conduct high-quality, high-impact audits of SDG implementation, in line with the SDGs Audit Model (**ISAM**) developed by the INTOSAI Development Initiative².

2. Open Data Audit Products (ODPs):

A selection of aggregated datasets derived from audit findings (when audit standards allow and full accomplishing all ISSAI rules) is transformed into **open, high-value, and reusable data products**, representing a dynamic and actionable form of audit knowledge, by aligning audit outputs with major **data forums and ecosystems**, this approach positions public audit as a key contributor to the generation of new social knowledge.

3. Impact-Oriented Follow-Up Tools:

The model promotes the use of **SMART indicators** (Specific, Measurable, Achievable, Relevant, and Time-bound) to monitor the implementation of audit recommendations, with a focus on addressing the structural root causes underlying the issues identified in audit findings. This approach enables data-driven follow-up stage and aligns with INTOSAI's emphasis on results-oriented auditing and the effective use of follow-up mechanisms to increase audit impact.

4. Integration in the National and Global Data Ecosystem:

¹ The Social Return of Public Auditing: A Methodological Proposal to Maximize Impact in the Evaluation of Public Policies. Leonardo Visconti Cox. April 2025.

² <https://idi.no/elibrary/relevant-sais/auditing-sustainable-development-goals-programme/isam/1993-isam-2024-final-ecopy/file>.



SAIs and RAIs operate as both data producers and data users within national and international data ecosystems. Their integration into these ecosystems, through interoperability frameworks, high-frequency data streams, and data fusion techniques, enriches the social data analysis throughout the audit cycle.

5. Measurement of the Social Return of Public Auditing (SRPA):

The SRPA is a framework designed to measure the social value generated by the auditing activity of a SAI, both at institutional level and in each individual audit. This model was conceptualized by José Antonio Monzó Torrecillas, Silvia Solanas Alcaide, and the author of this proposal³, recognized for its originality, clarity, and innovation with the award for **Best Poster at the XI Spanish National Congress of Public Sector Audit (October 2024)**, highlighting its potential for practical application within SAIs and RAIs. The SRPA adopts a multidimensional approach, integrating both quantitative metrics and qualitative dimensions, aligned with the INTOSAI-P12 principles, to assess how audits contribute to improving people's lives, strengthening public value, and enhancing inclusive governance.

6. Knowledge Sharing Network:

The **System for the Exchange of Audit Reports (SEAR)** —as conceptualized⁴ by the author of this study— is proposed as an international platform for knowledge sharing and co-creation, by adopting SRPA as a common assessment language, it fosters peer learning, methodological innovation, and cooperation among SAIs and RAIs.

7. Full Integration of Data Science Across the Audit Cycle:

³ https://recex.tcu.es/export/sites/nuevo-recex/galleries/pdf/R79_ART-1-JAMT-SSA-LVC.pdf.

⁴ The Social Return of Public Auditing: A Methodological Proposal to Maximize Impact in the Evaluation of Public Policies. Leonardo Visconti Cox. April 2025.



As highlighted the author of this study in the article “*Data-Driven Performance Auditing: Strengthening Social Accountability*”⁵, data science disciplines provide a robust foundation for data-driven audits, particularly in evaluating public policy outcomes and monitoring progress on the SDGs, and SAIs can strengthen data-driven decision-making, enhance transparency, and improve social accountability. The institutional embodiment of this data-driven specialization is the **Data Lab**—a dedicated unit within SAIs or RAIs that consolidates analytical capacities and acts as a hub for audit innovation.

8. Audit Data Standardization Framework:

This proposal introduces a pioneering system for **Audit Data Standardization**, aimed at transforming the **microdata contained in audit reports**—including findings, conclusions, and recommendations—into **structured, categorized, and interoperable datasets**. This enables a **holistic, entity-wide view** of audit knowledge and facilitates its integration into advanced data analytics processes. By parametrizing audit outputs, the framework supports aggregated analysis, cross-audit comparisons, and serves as a foundation for machine learning models that can detect patterns by data mining, generate strategic insights, and reinforce institutional learning.

5. CONCLUSIONS

An audit methodology grounded in the principle of *Leave No One Behind* positions SAIs and RAIs as key enablers of inclusive governance and social value creation. Structured around eight strategic dimensions, the model contributes to the SRPA, a multidimensional indicator designed to assess the impact of audit reports and the social value of audit activity. From promoting targeted outreach

⁵ Asian Journal of Government Audit. <https://asosaijournal.org/data-driven-performance-auditing-strengthening-social-accountability-sai-spain/>.



through Cross-Cutting Labs — integrated with Social and Data Labs — to advancing open data products, audit data standardization, and full integration into national and global data ecosystems, each dimension enhances the audit cycle’s capacity to generate high -value social knowledge. By institutionalizing data science tools and fostering global knowledge exchange through platforms such as SEAR, the model aligns with INTOSAI-P12 principles and contributes to the SDGs. This approach reinforces the role of SAIs and RAIs as changemakers — producing actionable insights, democratizing access to audit-based knowledge, and making a difference in citizens’ lives, from current and future generations.